

E 504

KANT'S CRITICAL PHILOSOPHY



MACMILLAN AND CO., LIMITED

LONDON • BOMBAY • CALCUTTA
MELBOURNE

THE MACMILLAN COMPANY

NEW YORK • BOSTON • CHICAGO
DALLAS • SAN FRANCISCO

THE MACMILLAN CO. OF CANADA, LTD.

TORONTO

KANT'S CRITICAL PHILOSOPHY

FOR ENGLISH READERS

J. P. MAHAFFY, D.D., C.V.O.

PROVOST OF TRINITY COLLEGE, DUBLIN

AND

J. H. BERNARD, D.D., D.C.L.

ARCHBISHOP OF DUBLIN

THIRD EDITION

VOL. II

THE PROLEGOMENA TRANSLATED, WITH NOTES AND
APPENDICES

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON

1915

COPYRIGHT

First Edition published Elsewhere.

Second Edition, 1889.

Third Edition, 1915.

PREFACE

THE following translation of Kant's *Prolegomena to any Future Metaphysic* is not the first which has been laid before the English public. Richardson published a translation in 1818, which is now so rare that Mr. Lewes, though his knowledge of this sort of literature was exceedingly wide, seemed to be unaware of its existence.¹ When I had completed part of the task, I chanced to find a copy of this book, which is full of errors and inaccuracies, but yet has merit enough to have escaped oblivion, had the author published it at a time when anything whatever was known in England about Kant's philosophy. I was tempted to use it in some sections as the basis of the present work, in order to relieve myself of the tedium of writing out the whole translation. But so many corrections were necessary that it hardly saved me any trouble, and probably my book may not have been improved by putting the new wine into the old bottles. Still I am answerable for the general correctness of the following translation, and believe that, clumsy as it may be, it is far more readable than Kant's original.

¹ *Hist. of Phil.* ii. p. 441, note.

There are at least twice as many full stops as in the German ; sundry missing verbs and pronouns have been supplied, and I have done what I could to make the terms more precise without damaging the faithfulness of the reproduction.

There is also recently published a good version by Mr. Bax, who had the advantage of using the First Edition of the present work, which appeared in 1872.

I need say nothing here of the scope of the *Prolegomena*, as Kant himself has explained it in his Introduction, but lay special stress on the fact, that while prior in time to the Second Edition of the *Kritik*, and professedly expounding the First Edition, its attitude is completely that of the Second Edition on the great question of idealism. When Schopenhauer's school talk of Kant's supposed change of opinion between 1781 and 1787, they should be reminded that in 1783 he wrote the *Prolegomena*, not to refute, but to explain his original *Kritik*, and that in no work has he spoken out more precisely against absolute idealism.

Most of the terms used do not require any special explanation, but the following points may be worth noticing. As in Vol. I., *knowledge* and *cognition* are both used, and used synonymously, on account of the convenience and precision of the forms *cognitive* and *cognise*, while the Saxon word is clearer to most readers. I have frequently printed the word *Reason* with a capital, where it means a

special faculty, as distinguished from the understanding, but as Kant himself often passes back to the wider meaning, it was impossible to distinguish all the individual occurrences of the more special meaning and to do more than call attention to the distinction. In the case of another word I have taken a liberty which appears to be an improvement on the original. While Kant uses *Begriff* as synonymous with our *concept*, he also uses it for those vaguer mental representations which are under no category, as, for example, God and Infinity. In these cases I have used the word *notion*, as being vaguer than *concept*, and may call the reader's attention to the curious fact that the Germans are not supplied with a special word to indicate a vaguer thought than a concept. Kant's *Vorstellung* includes intuitions, his *Idee* has a quite special meaning.

Apart from nomenclature, I have in many places endeavoured to bring out the point of the argument, by trifling additions or modifications—so trifling that they will not appear without a careful comparison with the original. It was indeed suggested to me in some of these places to translate quite literally, and leave the reader to solve the difficulty left by Kant. This indeed is the plan followed by Mr. Bax. But I venture to hope that nowhere has the sense of the original been changed, and it is better to run the risk of a mistake than to put down anything that does

not convey a distinct idea to the reader's mind. It is of course far more agreeable to paraphrase than to translate, and as the *Kritik* is accessible in English, this course was adopted in the former volume; but it is due to Kant to put his *Prolegomena* in all their homeliness literally before the reader, that he may judge of the accuracy of the various commentators and critics who discuss it.

I have reprinted in the Appendix the suppressed passages of Kant's First Edition of the *Kritik*. The text of the *Prolegomena* and of these Appendices has been carefully revised by Mr. Bernard, and many improvements made. We have also given in brackets the paging of the original edition, for the sake of the references made to it in our first volume.

J. P. MAHAFFY.

TRINITY COLLEGE, DUBLIN,
June 6, 1889.

The Third Edition is a reprint of that which was issued in 1889, with a few trifling corrections. No change has been made in the footnotes, although some refer to controversies as to Kant's meaning, which are now forgotten. The paging of the 1872 edition has been omitted.

J. P. M.

J. H. B.

September 1915.

CONTENTS

	PAGE
PREFACE	v
CONTENTS	ix
INTRODUCTION	I
PREAMBLE ON THE PECULIARITIES OF ALL METAPHYSICAL COGNITION	
Of the Sources of Metaphysic	13
Concerning the Kind of Cognition which can alone be called Metaphysical	14
Observations on the General Division of Judgments into Analytical and Synthetical	19
The General Question of the Prolegomena.—Is Metaphysic at all possible?	20
The General Problem: How is Cognition from Pure Reason possible?	26
How are Synthetic Propositions <i>a priori</i> possible?	27
FIRST PART OF THE GENERAL TRANSCENDENTAL PROBLEM	
How is Pure Mathematic possible?	32
SECOND PART OF THE GENERAL TRANSCENDENTAL PROBLEM	
How is the Pure Science of Nature [Physic] possible?	49
Logical Table of Judgments	59

	PAGE
Transcendental Table of the Pure Concepts of the Understanding	60
Pure Physiological Table of the Universal Principles of the Science of Nature	60
How is Nature itself possible?	77

APPENDIX TO THE PURE SCIENCE OF NATURE

Of the System of the Categories	83
---	----

THIRD PART OF THE MAIN TRANSCENDENTAL PROBLEM

How is Metaphysic in General possible?	89
Prefatory Remark to the Dialectic of Pure Reason	95
The Psychological Idea	96
The Cosmological Idea	102
Table of Dialectical Assertions of Pure Reason	103
The Theological Idea	114
General Remark on the Transcendental Ideas	115
CONCLUSION.—On the Bounds of Pure Reason	116

SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA

How is Metaphysic possible as a Science?	135
APPENDIX.—On what can be done to make Metaphysic actual as a Science	143

SPECIMEN OF A JUDGMENT ON THE <i>KRITIK</i> PRIOR TO ITS EXAMINATION	145
--	-----

APPENDIX A

DEDUCTION OF THE PURE CONCEPTS OF THE UNDERSTANDING

Of the <i>a priori</i> Grounds of the Possibility of Experience	155
Of the Relation of the Understanding to Objects in General, and of the Possibility of Cognising them <i>a priori</i>	170
Summary Statement of the Correctness and Possibility of this and no other Deduction of the Pure Concepts of the Understanding	180

APPENDIX B

	PAGE
DISTINCTION BETWEEN NOUMENA AND PHENOMENA .	182

APPENDIX C

THE FIRST PARALOGISM, OF SUBSTANTIALITY

Kritik of the First Paralogism of Pure Psychology	189
The Second Paralogism, of Simplicity	191
Kritik of the Second Paralogism of Transcendental Psychology .	191
The Third Paralogism, of Personality	199
Kritik of the Third Paralogism of Transcendental Psychology .	199
The Fourth Paralogism, of Ideality (of External Relations) .	203
Kritik of the Fourth Paralogism of Transcendental Psychology .	203
Reflection concerning the Whole of Pure Psychology, as an Appendix to these Paralogisms	214

APPENDIX D

PART OF THE 9TH SECTION OF THE ANTINOMY OF THE
PURE REASON

Possibility of Causality through Freedom in Harmony with the Universal Law of Natural Necessity	232
Further Elucidation of the Cosmological Idea of Freedom in Combination with the Universal Law of Natural Necessity .	235

KANT'S

PROLEGOMENA TO ANY FUTURE METAPHYSIC

INTRODUCTION

THESE Prolegomena are for the use, not of pupils, but of future teachers, and are intended to serve even the latter, not in arranging their exposition of an existing science, but in discovering this science itself.

There are learned men, to whom the history of philosophy (both ancient and modern) is philosophy itself; for such the present Prolegomena are not written. They must wait till those who endeavour to draw from the fountain of reason itself have made out their case; it will then be the historian's turn to inform the world of what has been done. Moreover, nothing can be said, which in their opinion has not been said already, and indeed this may be applied as an infallible prediction to all futurity; for as the human reason has for many centuries pursued with ardour infinitely various objects in various ways, it is hardly to be expected that we should not be able to match every new thing with some old thing not unlike it.

My object is to persuade all who think Metaphysic

worth studying, that it is absolutely necessary to adjourn for the present this (historical) labour, to consider all that has been done as undone, and to start first of all with the question, 'Whether such a thing as metaphysic be at all possible?'

If it be a science, how comes it that it cannot, like other sciences, obtain for itself an universal and permanent recognition? If not, how is it ever making constant pretensions, under this supposition, and keeping the human mind in suspense with hopes that never fade, and yet are never fulfilled? Whether then, as a result, we demonstrate our knowledge or our ignorance, we must come once for all to a definite conclusion about the nature of this pretended science, which cannot possibly remain on its present footing. It seems almost ridiculous, while every other science is continually advancing, that in this, which would be very Wisdom, at whose oracle all men inquire, we should perpetually revolve round the same point, without gaining a single step. And so its followers having melted away, we do not find men who feel able to shine in other sciences venturing their reputation here, where everybody, however ignorant in other matters, pretends to deliver a final verdict, as in this domain there is as yet no certain weight and measure to distinguish sound knowledge from shallow talk.

But after long elaboration of a science, when men begin to wonder how far it has advanced, it is not without precedent that the question should at last occur, whether and how such a science be even possible? For the human reason is so constructive, that it has already several times built up a tower, and then razed it to examine the nature of the foundation. It is never too late to mend; but if the change comes late, there is always more difficulty in setting it going.

The question whether a science be possible, presupposes a doubt as to its actuality. But such a doubt offends the men whose whole possessions consist of this supposed jewel ; hence he who raises the doubt must expect opposition from all sides. Some, in the proud consciousness of their possessions, which are ancient, and therefore considered legitimate, will take their metaphysical compendia in their hands, and look down on him with contempt ; others, who never see anything except it be identical with what they have seen before, will not understand him, and everything will remain for a time, as if nothing had happened to excite concern, or hope, for an impending change.

Nevertheless, I venture to predict that the independent reader of these Prolegomena will not only doubt his previous science, but ultimately be fully persuaded, that it cannot exist without satisfying the demands here stated, on which its possibility depends ; and, as this has never been done, that there is, as yet, no such thing as Metaphysic. But as it can never cease to be in demand—

‘Rusticus expectat, dum defluat amnis, at ille
Labitur et labetur in omne volubilis ævum ;’—

since the interests of mankind are interwoven with it so intimately, he must confess that a radical reform, or rather a new birth of the science after an original plan, must be unavoidably at hand, however men may struggle against it for a while.

Since the Essays of Locke and Leibnitz, or rather since the origin of metaphysic so far as we know its history, nothing has ever happened which might have been more decisive to the fortunes of the science than the attack made upon it by David Hume. He threw no light on this species of knowledge, but he certainly struck a spark from

which light might have been obtained, had it caught a proper substance to nurture and develop the flame.

Hume started chiefly from a single but important concept in Metaphysic—that of Cause and Effect (including the deduced notions of action and power). He calls on reason, which pretends to have generated this notion from itself, to answer him with what right it thinks anything to be so constituted, that if granted, something else must necessarily be granted thereby; for this is the meaning of the concept of cause. He demonstrated irresistibly that it was perfectly impossible for reason to think such a combination by means of concepts and *a priori*—a combination that contains necessity. We cannot at all see why, in consequence of the existence of one thing, another must necessarily exist, or how the concept of such a combination can arise *a priori*. Hence he inferred, that reason was altogether deluded by this concept, which it considered erroneously as one of its children, whereas in reality the concept was nothing but the bastard offspring of the imagination, impregnated by experience, and so bringing certain representations under the Law of Association. The subjective necessity, that is, the custom which so arises, is then substituted for an objective necessity from real knowledge.¹ Hence he inferred that the reason had no power to think such combinations, even generally, because its concepts would then be mere inventions, and all its pretended *a priori* cognitions nothing but common experiences marked with a false stamp. In plain language there is not, and cannot be, any such thing as metaphysic at all.² This conclusion, however hasty and mistaken, was at least

¹ Lit. insight. M.

² Nevertheless Hume called this very destructive science metaphysic, and attached to it great value. 'Metaphysic and morals (he says in the

founded upon investigation, and the investigation deserved to have suggested to the brighter spirits of his day a combined attempt at a happy solution of the problem proposed by him, if such solution were possible. Thus a complete reform of the science must have resulted.

But the perpetual hard fate of metaphysic would not allow him to be understood. We cannot without a certain sense of pain consider how utterly his opponents, Reid, Oswald, Beattie, and even Priestley, missed the point of the problem. For while they were ever assuming as conceded what he doubted, and demonstrating with eagerness and often with arrogance what he never thought of disputing, they so overlooked his indication towards a better state of things, that everything remained undisturbed in its old condition.

The question was not whether the concept of cause was right, useful, and even indispensable with regard to our knowledge of nature, for this Hume had never doubted. But the question to which Hume expected an answer was this, whether that concept could be thought by the reason *a priori*, and whether it consequently possessed an inner truth, independent of all experience, and therefore applied more widely than to the mere objects of experience. It was surely a question concerning the *origin*, not concerning the *indispensable use* of the concept. Had the former question been determined, the conditions of the use and

4th part of his Essays) are the most important branches of science ; mathematics and physics are not worth half so much.' But the acute author was here merely regarding the negative use arising from the moderation of the extravagant pretensions of speculative reason, and the complete settlement of the many endless and troublesome controversies that mislead mankind. He overlooked the positive injury which results, if the reason be deprived of its most important prospects, which can alone supply to the will the highest aim of all its efforts.

valid application of the concept would have been given *ipso facto*.

But the opponents of the great thinker should have probed very deeply into the nature of the reason, so far as it concerns pure thinking, if they would satisfy the conditions of the problem—a task which did not suit them. They therefore discovered a more convenient means of putting on a bold face without any proper insight into the question, by appealing to the *common sense of mankind*. It is indeed a great gift of God, to possess right, or (as they now call it) plain common sense. But this common sense must be shown practically, by well-considered and reasonable thoughts and words, not by appealing to it as an oracle, when you can advance nothing rational in justification of yourself. To appeal to common sense, when insight and science fail, and no sooner—this is one of the subtle discoveries of modern times, by means of which the most vapid babbler can safely enter the lists with the most thorough-going thinker, and hold his own. But as long as a particle of insight remains, no one would think of having recourse to this subterfuge. For what is it, but an appeal to the opinion of the multitude, of whose applause the philosopher is ashamed, while the popular and superficial man glories and confides in it? I should think Hume might fairly have laid as much claim to sound sense as Beattie, and besides to a critical understanding (such as the latter did not possess), which keeps common sense within such limits as to prevent it from speculating, or, if it does speculate, keeps it from wishing to decide when it cannot satisfy itself concerning its own principles. By this means alone can common sense remain sound sense. Chisels and hammers may suffice to work a piece of wood, but for steel-engraving we require a special instrument.

Thus common sense and speculative understanding are both serviceable in their own way, the former in judgments which apply immediately to experience, the latter when we judge universally from mere concepts, as in metaphysic, where that which calls itself (often *per antiphrasin*) sound common sense has no right to judge at all.

I honestly confess, the suggestion of David Hume was the very thing, which many years ago first interrupted my dogmatic slumber, and gave my investigations in the field of speculative philosophy quite a new direction. I was far from following him in all his conclusions, which only resulted from his regarding not the whole of his problem, but a part, which by itself can give us no information. If we start from a well-founded, but undeveloped, thought, which another has bequeathed to us, we may well hope by continued reflection to advance farther than the acute man, to whom we owe the first spark of light.

I therefore first tried whether Hume's objection could not be put into a general form, and soon found that the concept of the connexion of cause and effect was by no means the only one by which the understanding thinks the connexion of things *a priori*, but rather that metaphysic consists altogether of such connexions. I sought to make certain of their number, and when I had succeeded in this to my expectation, by starting from a single principle, I proceeded to the deduction of these concepts, which I was now certain were not deduced from experience, as Hume had apprehended, but sprang from the pure understanding. This deduction, which seemed impossible to my acute predecessor, which had never even occurred to any one else, though they were all using the concepts unsuspectingly without questioning the basis of their objective validity—this deduction was the most difficult task ever undertaken

in aid of metaphysic. More especially, no existing metaphysic could assist me in the least, because this deduction must prove the very possibility of metaphysic. But as soon as I had succeeded in solving Hume's problem not merely in a particular case, but with respect to the whole faculty of pure reason, I could proceed safely, though slowly, to determine the whole sphere of pure reason completely and from general principles, in its bounds, as well as in its contents. This was what metaphysic required, in order to construct its system safely.

But I fear that the *carrying out* of Hume's problem in its widest extent (viz. my Kritik of the Pure Reason) will fare as the *problem* itself fared, when first proposed. It will be misjudged because it is misunderstood, and misunderstood because men choose to skim through the book, and not to *think* through it—a disagreeable task, because the work is dry, obscure, opposed to all ordinary notions, and moreover voluminous. I confess, however, I did not expect to hear from philosophers complaints of want of popularity, entertainment, and facility, when the existence of a highly esteemed and to us indispensable cognition is at stake, which cannot be established otherwise than by the strictest rules of scholastic accuracy. Popularity may follow, but is inadmissible at the commencement. Yet as regards a certain obscurity, arising partly from the extent of the plan, in which the principal points of the investigation cannot be easily gathered into view, the complaint is partly just, and I intend to remove it by the present Prolegomena.

The work which represents the pure faculty of reason in its whole compass and bounds will always remain the groundwork to which the Prolegomena, as a preliminary exercise, refer; for we must have that Kritik completed as a science, systematically, in its minutest

details, before we can think of letting Metaphysic appear on the scene, or even have the most distant hope of attaining it.

We have been long accustomed to seeing antiquated knowledge produced as new by being taken out of its former context, and fitted into a suit of any fancy pattern under new titles. Most readers will set out by expecting nothing else from the *Kritik* ; but these *Prolegomena* may persuade him that it is a perfectly new science, of which no one has ever even thought, the very idea of which was unknown, and for which nothing hitherto accomplished can be of the smallest use, except it be the indication suggested by Hume's doubts. Yet even he did not suspect such a formal science, but ran his ship ashore, for safety's sake, on scepticism, there to let it lie and rot ; whereas my object is rather to give it a pilot, who, by means of safe astronomical principles drawn from a knowledge of the globe, and provided with a complete chart and compass, may steer the ship safely, whither he listeth.

If we proceed to a perfectly isolated and peculiar new science, with the presupposition that we can judge it by means of a supposed science that has been already acquired, whereas the reality of this latter must be first of all thoroughly questioned—if we do this, it will make men think they merely recognise old knowledge. For the terms are similar, with this difference, that everything must appear distorted, absurd, and unintelligible, because men start from a mental attitude not the author's, but their own, which through long habit has become a second nature. But the voluminous character of the work, so far as it depends on the subject, and not the exposition, its consequent unavoidable dryness, and its scholastic accuracy—these are qualities which can only benefit the science, though they may damage the book.

Few writers are gifted with the subtilty, and at the same time with the grace of David Hume, or with the depth, as well as the elegance, of Moses Mendelssohn. Yet I flatter myself I might have made my own exposition popular, had my object been merely to sketch out a plan, and leave its completion to others, instead of having my heart in the welfare of the science that I had so long pursued ;¹ in truth, it required no little constancy, and even self-denial, to postpone the sweets of an immediate success to the prospect of a slower, but more lasting reputation.

Making plans is often the occupation of a luxurious and boastful mind, which thus obtains the reputation of a creative genius, by demanding what it cannot itself supply ; by censuring, what it cannot improve ; and by proposing, what it knows not where to find. And yet something more should belong to a sound plan of a general Kritik of the Pure Reason than mere conjectures, if this plan is to be other than the usual declamation of pious aspirations. But pure reason is a sphere so separate and self-contained, that we cannot touch a part without affecting all the rest. We can therefore do nothing without first determining the position of each part, and its relation to the rest ; for, as our judgment cannot be corrected by anything without, the validity and use of every part depends upon the relation in which it stands to all the rest within the reason.

So in the structure of an organized body, the end of each member can only be deduced from the full conception of the whole. It may, then, be said of such a Kritik, that it is never trustworthy except it be *perfectly complete*, down

¹ It is not a little remarkable that Kant expresses an exactly contrary opinion in the conclusion to his Second Preface to the Kritik, where he invites those who are possessed of the gift of popular teaching to assist in explaining his system, and where he confesses himself devoid of it.—*Kritik*, p. xlii. M.

to the smallest elements of the reason. In the sphere of this faculty you can determine either *everything* or *nothing*.

But although a mere sketch, preceding the Kritik of Pure Reason, would be unintelligible, unreliable and useless, it is all the more useful as a sequel. For so we are able to grasp the whole, to examine in detail the chief points of importance in the science, and to improve in many respects our exposition, as compared with the first execution of the work.

Such is the plan sketched out in the following pages, which, after the completion of the work, may be carried out *analytically*, though the work itself must absolutely be executed in the *synthetical* method, in order that the science may present all its articulations, as the structure of a peculiar cognitive faculty, in their natural combination. But should any reader find this plan, which I publish as the Prolegomena to any future Metaphysic, itself difficult, let him consider that every one is not bound to study Metaphysic, that there are many minds which succeed very well, in genuine and even deep sciences more closely allied to intuition, while they cannot succeed in investigations proceeding only by means of abstract concepts.¹ In such cases men should apply their talents to other subjects. But he that undertakes to judge, or still more to construct a system of Metaphysic, must satisfy the demands here made, either by adopting my solution, or by thoroughly refuting it, and substituting another. To evade it is impossible.

In conclusion, let it be remembered that this much-abused obscurity—a very common cloak for men's own

¹ It is nevertheless to be observed that a large proportion of great metaphysicians have been trained and distinguished mathematicians. The examples of Plato, Aristotle, Descartes, Leibnitz, Berkeley, and Kant will occur to the reader. Even in the present day there are some remarkable cases of this combination. M.

laziness or stupidity—has its uses, since all who in other sciences observe a prudent silence, in this speak authoritatively, and decide boldly, because their ignorance is not here contrasted with the knowledge of others. Yet it does contrast with sound critical principles, which we may therefore commend in the words of Virgil :

Ignavum, fucos, pecus a præsepibus arcent.

PROLEGOMENA

PREAMBLE ON THE PECULIARITIES OF ALL METAPHYSICAL COGNITION

§ 1. *Of the Sources of Metaphysic*

IF we wish to present a cognition *as a science*, we must first determine accurately the features which no other science has in common with it—in fact its *peculiarity*, otherwise the boundaries of all sciences become confused, and none of them can be treated thoroughly according to its nature.

This peculiarity may consist of a simple difference of *object*, or of the *sources of cognition*, or of the *kind of cognition*, or perhaps of all three conjointly. On this, therefore, depends the idea of a possible science and its territory.

First, as concerns the *sources* of metaphysical cognition, its very concept implies that they cannot be empirical. Its principles (including not only its fundamental judgments, but its fundamental concepts) must never be derived from experience. It must not be physical but metaphysical knowledge, viz. knowledge lying beyond experience. It can therefore have for its basis neither external experience, which is the source of physics proper, nor internal, which is the basis of empirical psychology. It is therefore

a priori knowledge, coming from pure Understanding and pure Reason.

But so far Metaphysic would not be distinguishable from pure Mathematic; it must therefore be called pure philosophical cognition; and for the meaning of this term I refer to the Kritik of the Pure Reason, p. 435, where the distinction between these two employments of the reason is sufficiently explained. So far concerning the sources of metaphysical cognition.

§ 2. *Concerning the kind of Cognition which can alone be called Metaphysical.*

a.—*Of the Distinction between Analytical and Synthetical Judgments in general.* The peculiarity of its sources demands that metaphysical cognition must consist of nothing but *a priori* judgments. But whatever be their origin, or their logical form, there is a distinction in judgments, as to their content, according to which they are either merely *explicative*, adding nothing to the content of the cognition, or *ampliative*, increasing the given cognition: the former may be called *analytical*, the latter *synthetical*, judgments.

Analytical judgments express nothing in the predicate but what has been already actually thought in the concept of the subject, though not so distinctly or with the same (full) consciousness.¹ When I say: All bodies are extended, I have not amplified in the least my concept of body, but have only analysed it, as extension was really thought to belong to that concept before the judgment was

¹ The difference between an attribute obscurely felt to be in the subject, which requires a judgment to explicate it, and an attribute necessarily joined to the subject, seems very small indeed. But a little reflection will show us that we cannot think the subject without the first, whereas the second is always seen to be an addition even if necessary. M.

made, though it was not expressed ; this judgment is therefore analytical. On the contrary, this judgment, All bodies have weight, contains in its predicate something not actually thought in the general concept of body ; it amplifies my knowledge by adding something to my concept, and must therefore be called synthetical.

b.—The Common Principle of all Analytical Judgments is the Law of Contradiction. All analytical judgments depend wholly on the law of Contradiction, and are in their nature *a priori* cognitions, whether the concepts that supply them with matter be empirical or not. For the predicate of an affirmative analytical judgment is already contained in the concept of the subject, of which it cannot be denied without contradiction. In the same way its opposite is necessarily denied of the subject in an analytical, but negative, judgment, by the same law of contradiction. Such is the nature of the judgments : all bodies are extended, and no bodies are unextended.

For this very reason all analytical judgments are *a priori* even when the concepts are empirical, as, for example, Gold is a yellow metal ; for to know this I require no experience beyond my concept of gold as a yellow metal : it is, in fact, the very concept, and I need only analyse it, without looking beyond it elsewhere.

c.—Synthetical Judgments require a different Principle from the Law of Contradiction. There are synthetical *a posteriori* judgments of empirical origin ; but there are also others which are certain *a priori*, and which spring from pure Understanding and Reason. Yet they both agree in this, that they cannot possibly spring from the principle of analysis, or the law of contradiction, alone ; they require a quite different principle, though, from whatever they may be deduced, they must be *subject to the law of contradiction*, which must never

be violated, even though everything cannot be deduced from it. I shall first classify synthetical judgments.

1. *Empirical Judgments* are always synthetical.¹ For it would be absurd to base an analytical judgment on experience, as our concept suffices for the purpose without requiring any testimony from experience. That body is extended, is a judgment established *a priori*, and not an empirical judgment. For before appealing to experience, we already have all the conditions of the judgment in the concept (of the subject), from which we have but to elicit the predicate according to the law of contradiction, and thereby to become conscious of the *necessity* of the judgment, which experience could not even teach us.

2. *Mathematical Judgments* are all synthetical. This fact seems hitherto to have altogether escaped the observation of those who have analysed the human reason; it even seems directly opposed to all their conjectures, though incontestably certain, and most important in its consequences. For as it was found that the conclusions of mathematicians all proceed according to the law of contradiction (as is demanded by all apodeictic certainty), men persuaded themselves that the axioms (fundamental principles) were known from the same law. This was a great mistake, for a synthetical proposition can indeed be comprehended according

¹ See the very important passage in the First Edition of the *Kritik*, quoted by me on p. 12 of Kuno Fischer's *Commentary*. 'In all synthetical judgments I must have something else (x) besides the concept of the subject, to which the understanding must apply, in order to discover a predicate not contained in the subject. In the case of empirical judgments this x is the complete experience of the subject, and my concept indicates that complete experience by means of a part of it, to which I can add other facts of the same experience, as belonging to the first.' It follows that these propositions, though synthetical as regards the concept, become analytical as regards our experience when actually completed. Cf. vol. i. p. 36, note. M.

to the law of contradiction, but only by presupposing another synthetical proposition from which it follows, never in itself.

First of all, we must observe that all proper mathematical judgments are *a priori*, and not empirical, because they carry with them necessity, which cannot be obtained from experience. But if this be not conceded to me, very good ; I shall confine my assertion to *pure Mathematic*, the very notion of which implies that it contains pure *a priori* and not empirical cognitions.

It might at first be thought that the proposition $7 + 5 = 12$ is a mere analytical judgment, following from the concept of the sum of seven and five, according to the law of contradiction. But on closer examination it appears that the concept of the sum of $7 + 5$ contains merely their union in a single number, without its being at all thought what the particular number is that unites them. The concept of twelve is by no means thought by merely thinking of the combination of seven and five ; and analyse this possible sum as we may, we shall not discover twelve in the concept. We must go beyond these concepts, by calling to our aid the intuition corresponding to one of them, say our five fingers, or five [visible] points (as Segner did in his arithmetic), and we must add successively the units of the five given in the intuition to the concept of seven.¹ Hence our concept is

¹ The reader will observe that to the *concept* of 7, the *intuition* of 5 is gradually added ; it is not an addition of two intuitions. In the case of $2 + 2 = 4$, this latter may be the case, but most probably more than 5 cannot be grasped in a single visible intuition. Accordingly 7 is first made up of $5 + 2$, and then the resulting concept used for further processes. The system adopted in Roman figures (which is indeed almost universal) illustrates the point exactly. Instead of writing six points or strokes, we write VI, substituting the symbol V, perhaps a rude representation of an open hand, for the intuition IIII. M.

really amplified by the proposition $7 + 5 = 12$, and we add to the first a second, not thought in it. Arithmetical judgments are therefore always synthetical, and the more plainly according as we take larger numbers; for in such cases it is clear that, however closely we analyse our concepts without calling intuition to our aid, we can never find the sum by such mere dissection.

Just as little is any principle of geometry analytical. That a straight line is the shortest between two points, is a synthetical proposition. For my concept of straight contains nothing of quantity, but only a quality. The attribute of shortness is therefore altogether additional, and not obtainable by any analysis of the concept. Intuition, which alone makes the synthesis possible, must here also be brought in to assist us.

Some other principles, assumed by geometers, are indeed actually analytical, and depend on the law of contradiction; but they only serve, as identical propositions, in the chain of method, and not as ¹ principles, ex. gr. $a = a$, the whole is equal to itself, or $a + b > a$, the whole is greater than its part. And yet even these, though they are recognised as valid from mere concepts, are only admitted in mathematics, because they can be represented in intuition.² What usually makes us believe that the predicate of such apodeictic judgments is already contained in our concept, and that the judgment is therefore analytical, is the ambiguity of the expression. For we ought to add in

¹ Reading *a/s*, not *aus*. M.

² The remainder of this paragraph is very difficult, except we understand it, not of the analytical judgments just described, to which Kant's language would seem to refer it, but of the synthetical axioms previously discussed. The whole passage, beginning from the analysis of $7 + 5 = 12$, is transcribed verbatim into the Second Edition of the *Kritik*, without a single explanation. Cf. vol. i. p. 38. M.

thought a certain predicate to a given concept, and this necessity already attaches to the concepts. But the question is not what we *must* join in thought *to* the given concept, but what we actually think *in* it, though obscurely ; and so it appears that the predicate belongs to these concepts necessarily indeed, yet not as thought in the concept itself, but through the intervention of an intuition, which must be added.

§ 3. *Observations on the General Division of Judgments into Analytical and Synthetical.*

This division is indispensable, as concerns the Kritik of the human understanding, and therefore deserves to be called classical ; I know not whether it is elsewhere of important use. And this is the reason why dogmatic philosophers, who always seek the sources of metaphysical judgments in Metaphysic itself, and not apart from it, in the pure laws of reason generally—why these men altogether neglected this apparently obvious distinction. So it was that the celebrated Wolf, and his acute follower Baumgarten, came to seek the proof of the principle of Sufficient Reason, which is clearly synthetical, in the principle of Contradiction. In Locke's Essay, on the contrary, I find an indication of my division. For in the fourth book (chap. iii. § 9, *seq.*), after he has discussed the various connexions of representations in judgments, and their sources, one of which he makes identity and contradiction (analytical judgments), and another the coexistence of representations in a subject, he afterwards confesses (§ 10) that our *a priori* knowledge of the latter is very narrow, and almost nothing. But in his remarks on this species of cognition, there is so little of what is definite, and

reduced to rules,¹ that we cannot wonder if no one, not even Hume, was led to make investigations concerning this sort of judgments. For such general and yet determinate principles are not easily learned from other men, who have had them obscurely in their minds. We must hit on them first by our own reflection, then we find them elsewhere, where we could not possibly have found them at first, because the authors themselves did not know that such an idea lay at the basis of their observations. Men who never think independently have nevertheless the acuteness to discover everything, after it has been once shown them, in what was said long since, though no one ever saw it there before.

§ 4. *The General Question of the Prolegomena.*
Is Metaphysic at all possible?

Were a Metaphysic, which could maintain its place as a science, really in existence—if we could say, here is Metaphysic, learn it, and it will convince you irresistibly and irrevocably of its truth—then this question would be useless, and there would only remain that other, which is rather a test of our acuteness, than a proof of the existence of the

¹ Unfortunately, Kant had not observed the really decisive passage in Locke on the point. When discussing officially the various kinds of agreement and disagreement among our ideas, he actually enumerates the very classes, *with the very examples*, of Kant. First, judgments of identity and diversity, sc. analytical, and his example is: Blue is not yellow. Secondly, judgments of relation, an ill-chosen term, but evidently the same as Kant's synthetical *a priori*, for his example is a mathematical judgment, such as: The angles of a triangle are equal to two right angles. Thirdly, judgments of coexistence (synthetical *a posteriori*), such as: Gold is fusible. Fourthly, judgments of existence (afterwards distinguished by Kant as *subjectively* synthetical), such as: God is. Can anything be more distinct than this? See Locke's *Essay*, book iv. chap. i. § 7, and cf. vol. i. p. 33. M.

thing itself—I mean, the question *how the science is possible*, and how the understanding comes to attain it. But the human reason has not been so fortunate in this case. There is no single book to which you can point as you do to Euclid, and say: This is Metaphysic; here you may find the noblest objects of this science, the knowledge of a highest Being, and of a future existence, proved from principles of pure reason. We can be shown indeed many judgments, demonstrably certain, and never questioned; but these are all analytical, and rather concern the materials and the scaffolding for Metaphysic, than the extension of knowledge, which is our proper object in studying it (§ 2). Even supposing you produce synthetical judgments (such as the law of Sufficient Reason), which you could never have proved, as you ought, from pure reason *a priori*, but which we gladly concede, nevertheless, when they come to be employed for your principal object, you lapse into such doubtful assertions, that in all ages one Metaphysic has contradicted another, either in its assertions, or their proofs, and thus has itself destroyed its own claim to lasting assent. Nay the very attempts to set up such a science are the main cause of the early appearance of scepticism, a mental attitude in which reason treats itself with such violence that it could never have arisen save from complete despair of ever satisfying our most important aspirations. For long before men began to question nature methodically, they questioned isolated reason, which had to some extent been exercised by means of ordinary experience; for reason is ever present, while laws of nature must usually be sought with labour. So Metaphysic floated to the surface, like foam—like it also in this, that when what had been gathered was dissolved, there immediately appeared a new supply on the surface, to be ever eagerly collected by some, while

others, instead of seeking in the depths the cause of the phenomenon, thought they showed their wisdom by ridiculing the idle labour of their neighbours.

The essential and distinguishing feature of pure *mathematical* cognition among all other *a priori* cognitions is, that it cannot at all proceed *from concepts*, but only by means of the construction of concepts (Kritik, p. 435). As therefore in its judgments it must proceed beyond the concept to that which the corresponding intuition contains, these judgments neither can, nor ought to, arise analytically, by dissecting the concept, but are all synthetical.

I cannot refrain from pointing out the disadvantages resulting to philosophy from the neglect of this easy and apparently insignificant observation. Hume indeed was prompted (a task worthy of a philosopher) to cast his eye over the whole field of *a priori* cognitions in which the human understanding claims such mighty possessions. But he incautiously severed from it a whole, and indeed its most valuable, province, viz. pure mathematic. For he thought its nature, or, so to speak, its constitution, depended on totally different principles, namely, on the law of contradiction alone; and although he did not divide judgments so formally or universally as I have here done, what he said was equivalent to this: that mathematic contains only *analytical*, but metaphysic synthetical *a priori* judgments. In this he was greatly mistaken, and the mistake had a decidedly injurious effect upon his whole conception [system]. But for this, he would have extended his question concerning the origin of our synthetical judgments far beyond the metaphysical concept of Causality, and included in it the possibility of mathematic *a priori* also, for this latter he must have assumed to be equally synthetical.

And then he could not have based his metaphysical judgments on mere experience without subjecting the axioms of mathematic equally to experience, a thing which he was far too acute to do.¹ The good company into which metaphysic would thus have been brought, would have saved it from the danger of a contemptuous ill-treatment, for the thrust intended for it must have reached mathematic, which was not and could not have been Hume's intention. Thus that acute man would have been led into considerations which must needs be similar to those that now occupy us, but which would have gained inestimably by his inimitably elegant style.

Proper metaphysical judgments are all synthetical. We must distinguish judgments *belonging to metaphysic* from properly metaphysical judgments. Many of the former are analytical, but they only afford the means for metaphysical judgments, which are the whole end of the science, and which are always synthetical. For whatever concepts belong to metaphysic (as, for example, substance), the judgments, which arise from their mere analysis, belong also to metaphysic ; as, for example, substance is that which only exists as subject ; and by means of several such analytical judgments, we seek to approach the definition of the concept. But as the analysis of pure concepts of the understanding, such as are found in metaphysic, does not proceed indifferently from the dissection of any other (empirical) concept, not belonging to metaphysic (such as: the air is an elastic fluid, the elasticity of which is not removed by any known

¹ Kant's confidence on this point is hardly justified. For in Hume's *Essays* (which he declares to be his final declaration on Philosophy) there are a good many hints that mathematics might be based on experience. Cf. *Essays*, vol. ii. p. 468, note, etc. ; and in the *Treatise* it is still more plain that he regarded experience as their ultimate ground. Cf., however, vol. i. pp. 34 and 40, note. M.

degree of cold), it follows that the concept indeed, but not the analytical judgment, is properly metaphysical. This science has something peculiar in the production of its *a priori* cognitions, which must therefore be distinguished from the features it has in common with other rational knowledge. Thus the judgment, that all the substance in things is permanent, is a synthetical and properly metaphysical judgment.

If the *a priori* principles, which constitute the materials of metaphysic, have first been collected on fixed principles, then their analysis is of great value; it can also be taught as a particular part (as a *philosophia definitiva*), containing nothing but analytical judgments pertaining to metaphysic, and separate from the synthetical, which constitute metaphysic proper. And indeed these analyses are not elsewhere of much value, except in metaphysic, that is, as regards the synthetical judgments, which are to be generated by these previously analysed concepts.

The conclusion drawn in this section then is, that metaphysic is properly concerned with synthetical propositions *a priori*, and these alone constitute its end, for which it indeed requires various analyses of its concepts, which are analytical judgments, but wherein the procedure is not different from that in every other sort of knowledge, in which we merely seek to render our concepts distinct by analysis. But the *generation* of *a priori* cognition, as well of intuition as according to concepts, in fine of synthetical propositions *a priori* in philosophical cognition, this makes up the essential matter of Metaphysic.

Wearily therefore as well of dogmatism, which teaches us nothing, as of scepticism, which does not even promise us anything, not even the quiet state of a contented ignorance—excited [as we are] by the importance of a cognition of

which we stand in need, and rendered suspicious by long experience with regard to all knowledge which we believe we possess, or which offers itself, under the title of pure reason—there remains but one critical question to which the answer must determine our future procedure: *Is Metaphysic at all possible?* But this question must be answered not by sceptical objections to the assertions of actual [systems of] Metaphysic (for we do not as yet admit such a thing), but from the conception, as yet only *problematical*, of a science of this sort.

In the *Kritik of the Pure Reason* I have treated this question synthetically, by making inquiries into pure reason itself, and endeavouring in this source to determine the elements as well as the laws of its pure use according to principles. The task is difficult, and requires a resolute reader to penetrate by degrees into a system, based on no data except the reason itself, which therefore seeks, without resting upon any fact, to unfold knowledge from its original germs. *Prolegomena* on the contrary are designed for exercises; they are intended rather to point out what we have to do in order to realise [if possible] a science, than to propound it. They must therefore rest upon something already known as trustworthy, from which we can set out with confidence, and ascend to sources as yet unknown, the discovery of which will not only explain to us what we knew, but exhibit a sphere of many cognitions which all spring from the same sources. The method of *Prolegomena*, especially of those designed as a preparation for future metaphysic, is consequently *analytical*.

But it happens fortunately that, though we cannot assume metaphysic to be an actual science, we can say with confidence that certain pure *a priori* synthetical cognitions, *pure Mathematic* and *pure Physic*, are actual and given; for

both contain propositions, which are thoroughly recognised as apodeictically certain, partly by mere reason, partly by general consent [arising] from experience, and yet as independent of experience. We have therefore some at least *uncontested* synthetical knowledge *a priori*, and need not ask if it be possible (for it is actual), but *possible*, in order that we may deduce from the principle which makes the given cognitions possible the possibility of all the rest.

The General Problem : How is Cognition from Pure Reason possible ?

§ 5. We have already seen the vital distinction between analytical and synthetical judgments. The possibility of analytical propositions was easily comprehended, being entirely founded on the law of Contradiction. The possibility of synthetical *a posteriori* judgments, of those which are gathered from experience, likewise requires no particular explanation ; for experience is nothing but a continual synthesis of perceptions. There remain therefore only synthetical propositions *a priori*, of which the possibility must be sought or investigated, because they must depend upon other principles than that of contradiction.

But we have no right to seek the *possibility* of such propositions here, that is, to inquire whether they are possible. For there are enough of them actually given with undoubted certainty, and as our present method is analytical, we shall start from the assertion, that such synthetical but pure cognition of the reason actually exists ; but we must then *inquire into* the ground of this possibility, and ask, how this cognition is possible, in order that we may from the principles of its possibility be enabled to

determine the conditions of its use, its sphere and its bounds. The proper problem upon which all depends, when expressed with scholastic precision, is therefore :

How are Synthetic Propositions a priori possible ?

For the sake of popularity I have above expressed this problem somewhat differently, as an inquiry after knowledge from pure reason, and this I could do for once without detriment to the desired view [Einsicht], because, as we have only to do here with metaphysic and its sources, the reader will, I hope, after the foregoing remarks, keep in mind that when we speak of knowledge from pure reason, we do not mean analytical, but always synthetical cognition.¹

Upon the solution of this problem the standing or the falling of Metaphysic and consequently its existence entirely depend. Let any one make assertions ever so plausible with regard to it,—let him pile conclusions upon conclusions till they almost smother us,—if he has not been previously able to answer this question satisfactorily, I have a right to say: this is all vain groundless philosophy and

¹ As knowledge gradually advances, certain expressions now classical, which have been used since the infancy of science, cannot but be found insufficient and unsuitable, and there cannot but be some danger of confusing a newer and more appropriate use with the older. The analytical method, so far as it is opposed to the synthetical, is very distinct from a complex of analytical propositions: it signifies only that we set out from what is sought, as if it were given, and ascend to the only conditions under which it is possible. In this method we often use nothing but synthetical propositions, as in mathematical analysis, and it were better to term it the regressive method, in contradistinction to the synthetic or progressive. A principal part of Logic too is distinguished by the name of Analytic, which here signifies the logic of truth (in contrast to Dialectic), without considering whether the cognitions belonging to it are analytical or synthetical.

false wisdom. You speak through pure reason, and profess, as it were, to create cognitions *a priori* by not only dissecting given concepts, but also by asserting connexions which do not rest upon the principle of contradiction, and which you profess to perceive quite independently of all experience ; how do you attain this, and how will you justify yourself in such pretensions? An appeal to the consent of the common sense of mankind cannot be allowed ; for that is a witness whose reputation depends only upon public rumour,

Quodcunque ostendis mihi sic, incredulus odi.

Indispensable, however, as it is to answer this question, it is equally difficult to do so ; and though the principal reason that this answer was not attempted long ago is, that the possibility of such a question never occurred to anybody, there is yet another reason. A satisfactory answer to this single question requires a much more constant, profound, and laborious reflection, than the most diffuse work on Metaphysic, which on its first appearance promised immortality to its author. And every intelligent reader, when he carefully reflects what this problem requires, must at first be struck with its difficulty, and would regard it as insoluble and even impossible, did there not actually exist pure synthetical cognitions *a priori*. This actually happened to David Hume, though he did not represent to himself the question at all so universally as is done here, and as must be done if the answer is to be decisive for all Metaphysic. For how is it possible, says that acute man, that when a concept is given me, I can go beyond it and connect with it another, which is not contained in it, and in such a manner as if the latter *necessarily* belonged to the former? Nothing but experience can furnish us with connexions of that sort (this was his inference from that difficulty, which

he held an impossibility), and all that supposed necessity, or, what is the same thing, all cognition *a priori* (held to be such), is nothing but a long habit of finding something true, and hence of holding subjective necessity to be objective.

If the reader should complain of the difficulty and the labour which I occasion him in the solution of this problem, let him endeavour to do it himself in an easier way. Perhaps he will then acknowledge the obligation due to him who has undertaken a work of such profound research, and will rather be surprised at the facility with which, considering the nature of the thing, the solution has been attained. Yet it has cost a labour of many years to solve this problem in its whole universality (in the mathematical sense, that is, sufficient for all cases), and finally to exhibit it in the analytical form, as the reader finds it here.

All metaphysicians are therefore solemnly and legally suspended from their occupations till they shall have answered in a satisfactory manner the question, *How are synthetic cognitions a priori possible?* For the answer contains the only credentials which they must show when they have anything to bring us in the name of pure reason. But if they do not possess these credentials, they can expect nothing else than to be dismissed without further inquiry by reasonable people, who have been already so often deceived.

If they on the other hand desire to carry on their business not as a *science*, but as an *art* of persuasion wholesome and suited to the general common sense of man, they cannot in justice be prevented. They will then speak the modest language of a rational faith, they will grant that they are not allowed even to *conjecture*, far less to *know*, anything which lies beyond the bounds of all possible experience, but only to *assume* something (not for speculative use, which they must abandon, but for practical only) that is possible

and even indispensable for the guidance of the understanding and of the will in life. In this manner only can they bear the title of useful and of wise men, and the more so in proportion as they renounce that of metaphysicians ; for these will be speculative philosophers, and as, when judgments *a priori* are in question, poor probabilities cannot be admitted (for what is pretended to be known *a priori* is thereby announced as necessary), such men cannot be permitted to play with conjectures, but their assertions must be either science, or worth nothing at all.

It may be said, that all transcendental philosophy, which necessarily precedes all Metaphysic, is nothing but the complete solution of the problem here propounded, in systematical order and completeness. Hitherto we have accordingly never had any transcendental philosophy ; for what goes by its name is properly a part of Metaphysic ; whereas the former science is intended first to constitute the possibility of this latter, and must therefore precede all Metaphysic. And it is not surprising that when a whole science, deprived of all help from other sciences, and consequently in itself quite new, is required to answer a single question sufficiently, we should find this answer combined with trouble and difficulty, nay even with obscurity.

As we now proceed to this solution, and according to the analytical method, in which we presuppose, that such cognitions from pure reason actually exist, we can only appeal to two sciences of theoretical cognition (as such only is under consideration here), *pure mathematic* and *the pure science of nature* (physic). For none but these can exhibit objects intuitively to us, and consequently (if there should occur in them a cognition *a priori*) can show the truth or harmony of the cognition with the object *in concreto*, that is, its actuality, from which we could then proceed to the

ground of its possibility by analytic procedure. This method facilitates our labour greatly, in which the universal considerations are not only applied to facts, but even set out from them, instead of which they must in synthetic procedure be entirely derived *in abstracto* from concepts.

But, in order to rise from these actual and at the same time well grounded pure cognitions *a priori* to a possible cognition (which we are seeking), or to Metaphysic as a science, it is necessary for us to comprehend that which occasions it, I mean the mere natural (though in spite of its truth not unsuspected), cognition *a priori* which lies at the basis of that science, the elaboration of which without any critical investigation of its possibility is commonly called metaphysic,—in a word, we must comprehend the natural predisposition to such a science under our chief inquiry, and thus will the general transcendental problem, divided into four other questions, be gradually answered :

1. *How is pure mathematic possible ?*
2. *How is pure physic [science of nature] possible ?*
3. *How is metaphysic in general possible ?*
4. *How is metaphysic as a science possible ?*

It may be seen that the solution of these problems, though chiefly designed to exhibit the essential matter of the Kritik, has yet something peculiar, which deserves attention in itself. This is the seeking the sources of given sciences in the reason itself, so that its faculty of knowing something *a priori* may be investigated and measured by means of the act itself. By this procedure these sciences themselves gain, if not with regard to their content, yet as to their right use, and while they throw light on the higher question concerning their common origin, at the same time give occasion better to explain their individual nature.

FIRST PART OF THE GENERAL TRANSCENDENTAL PROBLEM

How is Pure Mathematic possible?

§ 6. HERE is a great and established cognition, which embraces even now a wonderful sphere, and bespeaks hereafter an unbounded extension, which carries with it thoroughly apodeictical certainty, that is, absolute necessity, which therefore rests upon no empirical grounds, and consequently is a pure product of reason, and moreover is thoroughly synthetical. ‘How then is it possible for human reason to bring to pass a cognition of this nature entirely *a priori*?’ Does not this faculty, as it neither is nor can be based upon experience, presuppose some ground of cognition *a priori*, which lies deeply hidden, but which might reveal itself by these its effects, if their first beginnings were but diligently investigated?

§ 7. But we find all mathematical cognition having this peculiarity, that it must previously exhibit its concept *in intuition* and indeed *a priori*, therefore in an intuition which is not empirical, but pure. Without this process Mathematic cannot take a single step; hence its judgments are always *intuitive*; whereas philosophy must be satisfied with *discursive* judgments *from mere concepts*, and though it may illustrate its doctrines by intuition, can never derive them

from it. This observation on the nature of Mathematic gives us a clue to the first and highest condition of its possibility, which is, that *some pure intuition* must form its basis, in which all its concepts can be exhibited or *constructed, in concreto* and yet *a priori*. If we can find out this pure intuition and its possibility, we may thence easily explain how synthetical propositions *a priori* are possible in pure mathematic, and consequently how this science itself is possible. Empirical intuition enables us without difficulty to enlarge the concept which we frame of an object of intuition, by new predicates, which intuition itself presents synthetically in experience. Pure intuition does so likewise, only with this difference, that in the latter case the synthetical judgment is *a priori* certain and apodeictical, in the former, only *a posteriori* and empirically certain; because this latter contains only what occurs in contingent empirical intuition, but the former, what must be met in pure intuition necessarily, for the predicate is inseparably conjoined as intuition *a priori* with the concept *before all experience* or individual perception.

§ 8. But with this step our perplexity seems rather to increase than to lessen. For the question now is, *How is it possible to intuit anything a priori?* An intuition is such a representation as immediately depends upon the presence of the object. Hence it seems impossible *originally* to intuit *a priori*, because intuition would in that event take place without either a former or a present object to refer to, and by consequence could not be intuition. Concepts indeed are such, that we can easily form some of them *a priori* (namely, those which contain nothing but the thinking an object in general), without finding ourselves in an immediate relation to the object. Such are, for instance, the concepts of Quantity, of Cause, etc. But even these

require, in order to give them a signification, a certain concrete use—that is, an application to some intuition, by which an object of them is given us. But how can the *intuition* of the object precede the object itself?

§ 9. Were intuition of such nature as to represent things *as they are in themselves*, intuition could not take place *a priori*, but must be always empirical. For I can only know what is contained in the object in itself when it is present and given to me. It is indeed even then incomprehensible how the intuition of a present thing should make me know this thing as it is in itself, as its properties cannot migrate into my faculty of representation; but even granting this possibility, an intuition of that sort would not take place *a priori*, that is, before the object were presented to me: for without this latter fact no ground of relation between my representation and the object can be imagined: it must then depend upon direct inspiration [Eingebung]. It is therefore only possible in one way for my intuition to anticipate the actuality of the object, and to be cognition *a priori*: *if it* (the intuition) *contains nothing but the form of the sensibility, which precedes in me all the actual impressions through which I am affected by objects*. For I can know *a priori*, than objects of sense can only be intuited according to this form of the sensuous intuition. Hence it follows: that propositions, which concern this form of sensuous intuition only, are possible and valid for objects of the senses; as also, conversely that intuitions which are possible *a priori* can never concern any other things than objects of our senses.

§ 10. It is then only the form of sensuous intuition by which we can intuit things *a priori*, but by which we can know objects only as they *appear* to us (to our senses), not as they are in themselves; and this assumption is absolutely

necessary if synthetical propositions *a priori* be granted as possible, or if, in case they actually occur, their possibility is to be comprehended and determined beforehand.

But Space and Time are the intuitions which pure Mathematic lays at the foundation of all its cognitions, and of the judgments which appear at once demonstrable and necessary ; for Mathematic must first exhibit all its concepts in intuition, and pure Mathematic in pure intuition, that is, it must construct them ; otherwise (as it cannot proceed analytically, by dissection of concepts, but synthetically) it is impossible in this science to take a single step. For if pure intuition be wanting, there is nothing in which the matter for synthetical judgments *a priori* can be given. Geometry is based upon the pure intuition of space. Arithmetic accomplishes its concept of number by the successive addition of unities in time ; and pure Mechanic especially cannot attain its concepts of motion without employing the representation of time.¹ Both representations, however, are only intuitions ; for if we omit from the empirical intuitions of bodies and their alterations (motion) everything empirical, or belonging to sensation, space and time still remain, which are therefore pure intuitions that lie *a priori* at the basis of the empirical. Hence they can never be omitted, but at the same time, by their being pure intuitions *a priori*, they prove that they are mere forms of our

¹ The form of this statement, which makes an admission nowhere supported in the Kritik, is peculiar. I see in it a lurking doubt in Kant's mind whether Arithmetic may not be derived from Time, as all his commentators believed. He feels sure about Mechanic. The reader will also note that he speaks as if only the *concept of number generally* were so derived. This is certainly true of the *schema of quantity*, and may also be asserted of all very large numbers, which we cannot properly imagine, *except as requiring unfinished acts of addition*. Cf. vol. i. p. 52. M.

sensibility, which must precede all empirical intuition, or perception of actual objects, and conformably to which objects can be known *a priori*, but only as they appear to us.

§ 11. The problem of the present section is therefore solved. Pure mathematic, as synthetical cognition *a priori*, is only possible by referring to no other objects than those of the senses. At the basis of their empirical intuition lies a pure intuition (of space and of time) *a priori*. This is possible, because the latter intuition is nothing but the mere form of the sensitive faculty, which precedes the actual appearance of the objects, in that it in fact makes them possible. Yet this faculty of intuiting *a priori* affects not the matter of the phenomenon (that is, the sensation in it, for this constitutes that which is empirical), but its form, viz. space and time. Should any man venture to doubt that these are determinations adhering not to things in themselves, but to their relation to our sensibility, I should be glad to know how it can be possible to know *a priori* (and of course before all acquaintance with, or presentation of, things), how their intuition must be constituted; which however is here the case with space and time. But this is quite comprehensible as soon as both count for nothing more than formal conditions of our sensibility, while the objects count merely as phenomena; for then the form of the phenomenon, that is, the pure intuition, can by all means be represented as proceeding from ourselves, that is, *a priori*.

§ 12. In order to add something by way of illustration and confirmation, we need only attend to the ordinary and necessary procedure of geometers. All proofs of the complete equality¹ of two given figures (where the one can be com-

¹ As distinguished from *equivalence*, or merely equality of area. M.

pletely substituted for the other) come ultimately to superposition, which is evidently nothing else than a synthetical proposition resting upon immediate intuition, and this intuition must be given pure, or *a priori*, otherwise the proposition could not rank as apodeictically certain, but would have empirical certainty only. It could only be said that it is always remarked so, and holds as far as our perception reaches. That complete space (which is itself no longer the boundary of another space) has three dimensions, and that space in general cannot have more, is based on the proposition that not more than three lines can intersect at right angles in one point; but this proposition cannot by any means be shown from concepts, but rests immediately on pure and *a priori* intuition, because it is apodeictically certain. That we can require a line to be drawn to infinity (*in indefinitum*),¹ a series of changes to be continued (for example, spaces passed through by motion) *in indefinitum*, presupposes a representation of space and time, which can only attach to intuition, namely, so far as it in itself is bounded by nothing, for from concepts it could never be inferred. Consequently Mathematic is actually built upon pure intuitions, which make its synthetical and apodeictically valid propositions possible, and hence our transcendental deduction of the notions of space and of time explains at the same time the possibility of pure mathematic, which may be conceded, but by no means explained, without some such deduction, and without our assuming 'that everything which can be given to our senses (to the external sense in space, the internal in time) is intuited by us as it appears to us, not as it is in itself.'

¹ This identification of *unendlich* with *indefinitum* goes far to corroborate my rendering of the objectionable phrase in the Aesthetic, which speaks of space as an infinite (*unendlich*) given quantity. Cf. vol. i. p. 50, note. M.

§ 13. Those who cannot yet shake off the notion of space and time being actual qualities that inhere in things in themselves, may exercise their acumen on the following paradox. When they have in vain attempted its solution, and are free from prejudices at least for a few moments, they will suspect that the degradation of space and of time to mere forms of our sensuous intuition may perhaps be well founded.

When two things are quite similar in all the points, which can be known of each separately (in all the determinations pertaining to quantity and to quality), it must follow, that the one can in all cases and relations be put in the place of the other, without this substitution occasioning the least perceptible difference. This in fact is the case with plane figures in geometry; but various spherical figures exhibit, notwithstanding this complete internal agreement, such a [limited] one in their external relation, that the one figure cannot possibly be put in the place of the other; for instance, two spherical triangles on opposite hemispheres, which have an arc of the equator as their common base, may be quite equal, both as regards sides and angles, so that nothing is to be found in the simple and complete description of the one, that is not equally in the description of the other, and yet the one cannot be put in the place of the other (upon the opposite hemisphere). Here is then an *internal* difference between the two triangles, which difference no understanding can describe as internal, and which only manifests itself by external relations in space. But I shall give more obvious examples, taken from common life.

What can be more similar in every respect to my hand and to my ear, or in every part more alike, than their images in a mirror? And yet I cannot put such a hand as is seen in the glass in the place of its archetype; for if this is a right, that in the glass is a left hand, and the image or re-

flection of the right ear is a left one that never can supply the place of the other. Here there are no internal differences which any understanding could perceive by thought alone ; and yet the differences are internal as far as the senses teach, for the left hand cannot be enclosed in the same bounds as the right, notwithstanding the complete equality and similarity of both (they are not congruent) ; the glove of one hand cannot be used for the other. What is the solution ? Those objects are not representations of things as they are in themselves, and as the pure understanding would cognise them, but sensuous intuitions, that is, phenomena, the possibility of which rests upon the relation of certain things unknown in themselves to something else, viz. to our sensibility. Space is the form of the external intuition of this sensibility, and the internal determination of every [limited] space is only possible by the determination of its external relation to all space, of which it is a part (in other words, by its relation to the external sense) ; that is, the part is only possible through the whole, which is never the case with things in themselves, as objects of the mere understanding, but with phenomena only. And hence we cannot render the difference between similar and equal but incongruous things (for instance, spirals winding opposite ways¹) intelligible by any concept, but only by the relation to the right and the left hand, which relates immediately to intuition.

REMARK I.

Pure Mathematic, and especially pure geometry, can only have objective reality on condition of its referring to

¹ Not 'snails rolled up contrary to all sense,' as Mr. Richardson has it ! M.

objects of sense, in regard to which the principle holds good, that our sensuous representation is a representation not of things in themselves, but of the way in which they appear to us. Hence it follows, that the propositions of geometry are not the determinations of a mere creation of our poetic fancy, which therefore cannot be referred with certainty to actual objects ; but rather that they are necessarily valid of space, and consequently of all that may be found in it, because space is nothing else than the form of all external phenomena, in which [form] alone objects of sense can be given. Sensibility (of which the form is the basis of geometry) is that upon which the possibility of external phenomena rests ; these therefore can never contain anything but what geometry prescribes to them. It would be quite otherwise if the senses were so constituted as to represent objects as they are in themselves. For then it would not by any means follow from the representation of space, which the geometer makes his *a priori* foundation, with all its properties, that this space, together with what is thence inferred, must be so in nature. The space of the geometer would be considered a mere fiction, and no objective validity ascribed to it, because we cannot see how things must of necessity agree with an image of them, which we make spontaneously and previous to our perception of them. But if this image, or rather this formal intuition, is the essential property of our sensibility, by means of which alone objects are given to us, and if this sensibility represents not things in themselves, but phenomena—then it is very easy to comprehend, and at the same time to prove indisputably, that all the external objects of our world of sense must necessarily accord strictly with the propositions of geometry ; because the sensibility by means of its form of external intuition (in

other words, by space, with which the geometer is occupied), first of all makes those objects possible as mere appearances. It will always remain a remarkable feature in the history of philosophy, that there was once a time, when even mathematicians, who were philosophers too, began to doubt, not of the accuracy of their geometrical propositions so far as they concerned space, but of the objective validity and the applicability of this concept itself, and of all its determinations, to nature. They were apprehensive that a line in nature might consist of physical points, and consequently that true space in the object might consist of simple parts, though the space which the geometer has in his mind cannot be such. They did not recognise that this mental space makes the physical space, that is, the extension of matter, even possible; that this pure space is not at all a quality of things in themselves, but a form of our sensuous faculty of representation; and that all objects in space are mere phenomena, that is, not things in themselves but representations of our sensuous intuition. Space, therefore, as the geometer conceives it, is strictly the form of sensuous intuition which we find *a priori* in us, and contains the ground of the possibility of all external phenomena (as to their form), so that these must necessarily and accurately agree with the propositions of the geometer, which he draws not from any imaginary concept, but from the subjective basis of all external phenomena, which is the sensibility itself. In this and no other way can Geometry be secured (as to the undoubted objective reality of its propositions) from all the juggling of shallow Metaphysic, however surprising it may seem to this science, because it has not reverted to the sources of its concepts.

REMARK II.

Whatever is given us as object, must be given us in intuition. All our intuition however takes place by means of the senses only ; the understanding intuits nothing, but only reflects.¹ And as we have just shown that the senses never and in no manner enable us to know things in themselves, but only their phenomena, which are mere representations of the sensibility, we conclude that 'all bodies, together with the space in which they are, must be considered nothing but mere representations in us, and exist nowhere but in our thoughts.' You will say : Is not this manifest idealism ?

Idealism consists in the assertion, that there are none but thinking beings, all other things, which we think are perceived in intuition, being nothing but representations in the thinking beings, to which no object external to them corresponds in fact. Whereas I say, that things as objects of our senses existing outside us are given, but we know nothing of what they may be in themselves, knowing only their phenomena, that is, the representations which they cause in us by affecting our senses. Consequently I grant by all means that there are bodies without us, that is, things which, though quite unknown to us as to what they are in themselves, we yet know by the representations which their influence on our sensibility procures us, and which we call bodies, a term signifying merely the appearance of the thing which is unknown to us, but not therefore less

¹ This, and a dozen other such passages, should have kept Mr. Lewes (*Hist. of Phil.* ii. p. 515) from putting the vaguely-worded question : 'Did Kant mean that man has intuitive Reason ?' and still more from answering it in exactly the reverse way to what Kant would have done. M.

actual.¹ Can this be termed idealism? It is the very contrary.

All this had been generally assumed and granted long before Locke's time, and still more generally ever since—that, without detriment to the actual existence of external things, many of their predicates may be said to belong not to the things in themselves, but to their phenomena, and to have no proper existence outside our representation. Heat, colour, and taste, for instance, are of this kind. But that I should go farther, and rank as mere phenomena, for weighty reasons, the remaining qualities of bodies also, which are called primary, such as extension, place, and in general space, with all which belongs to it (impenetrability or materiality, figure, etc.)—against this proceeding no one can contend with any reason that it is inadmissible. As little as the man who admits colours not to be properties of the object in itself, but only modifications of the sense of seeing, can on that account be named an idealist, so little can my system be named idealistic, merely because I find *that more, nay, that all the properties which constitute the intuition of a body* belong merely to its phenomenon; for the existence of the thing that appears is thereby not destroyed, as in true idealism, but it is only shown, that we cannot possibly know it by the senses as it is in itself.

I should be glad to know what my assertions must be in order to avoid all idealism. I suppose I must say, not only that the representation of space is perfectly conformable to the relation which our sensibility has to objects

¹ This statement is more explicit than anything in the *Kritik*, and settles the question as to Kant's supposed idealism. Had his First Edition really differed from this exposition, he would never have suggested to his readers a comparison with the Second. M.

—for that I have said—but also that it is quite similar to them ; an assertion in which I can find as little meaning as if I said that the sensation of red has a similarity to the property of vermilion, which excites this sensation in me.

REMARK III.

Hence we may at once obviate an easily foreseen but worthless objection, ‘that by admitting the ideality of space and of time the whole sensible world would be turned into mere illusion.’ For men had at first spoiled all philosophical insight into the nature of sensuous cognition, by making the sensibility merely a confused mode of representation, according to which we still know things as they are, but without being able to bring everything in this our representation to a clear consciousness ; whereas we had proved, that sensibility consists not in this logical distinction of clearness and obscurity, but in the genetical one of the origin of cognition itself. For sensuous cognition represents things not at all as they are, but only the mode in which they affect our senses, and consequently by it phenomena only and not things themselves are given to the understanding for reflection. After this necessary correction, an objection is mooted arising from an unpardonable and almost intentional misconception, as if my system turned all the things of the world of sense into mere illusion.

When an appearance is given us, we are still quite free as to our judgment on the matter. The phenomenon depends upon the senses, but the judgment upon the understanding, and the only question is, whether in the determination of the object there is truth or not. But the difference between truth and dreaming is not ascertained by the nature of the representations, which are referred to objects (for

they are the same in both cases), but by their connexion according to those rules, which determine the coherence of the representations in the concept of an object, and by ascertaining whether they can subsist together in experience or not. And it is not the fault of the phenomena if our cognition takes illusion for truth, that is, if the intuition, by which an object is given us, is considered a concept of the thing or of its existence also, which the understanding can only think. The senses represent to us the paths of the planets as now forward, now backward, and herein is neither falsehood nor truth, because as long as we hold this path to be nothing but appearance, we do not judge of the objective nature of their motion. But as a false judgment may easily arise when the understanding does not carefully guard against this subjective mode of representation being considered objective, we say they appear to move backward ; it is not the senses however which are charged with the illusion, but the understanding, whose province alone it is to give an objective judgment on the phenomenon.

Thus, even if we did not at all reflect on the origin of our representations, and [merely] connect our intuitions of sense (whatever they may contain), in space and in time, according to the rules of the coherence of all cognition in experience, [still] illusion or truth may arise according as we are negligent or careful ; it is merely a question of the use of sensuous representations in the understanding, and not of their origin. Again—when I consider all the representations of the senses, together with their form, space and time, to be nothing but phenomena, and space and time to be a mere form of the sensibility, which is not to be met with in objects out of it, and when I make use of these representations in reference to possible experience only—there is nothing therein that can lead to error, nor is there any

illusion implied in my holding them mere phenomena ; for they can notwithstanding cohere rightly according to rules of truth in experience. Thus all the propositions of geometry hold good of space as well as of all the objects of the senses, consequently of all possible experience, whether I consider space as a mere form of the sensibility, or as something cleaving to the things themselves. It is only in the former case that I can comprehend how it is possible to know these propositions of all the objects of external intuition *a priori* ; everything else which regards all possible experience remains just as if I had not seceded from the common opinion.

But if I venture to go beyond all possible experience with my notions of space and time, which I cannot avoid doing if I proclaim them qualities which adhere to things in themselves (for what can prevent my letting them hold good of the same things, however my senses might be changed, and whether they were suited to them or not ?), then a grave error resting upon an illusion may arise. For I proclaim to be universally valid what is merely a subjective condition of the intuition of things and sure for all objects of sense, but therefore only valid for all possible experience ; since in doing so, I refer this condition to things in themselves, and do not limit it to the conditions of experience.

My theory of the ideality of space and of time, therefore, so far from reducing the whole sensible world to mere illusion, is rather the only means of securing the application of one of the most important cognitions (that which mathematic propounds *a priori*) to actual objects, and of preventing its being regarded mere illusion. For without this observation it would be quite impossible to make out whether the intuitions of space and time, which we borrow from no experience, and which yet lie in our repre-

sensation *a priori*, are not mere chimeras of our brain, to which no object whatever corresponds, at least adequately, and consequently, whether geometry itself is not a mere illusion, whereas we have been able to show its unquestionable validity with regard to all the objects of the sensible world because they are mere phenomena.

Secondly: These my principles, because they make phenomena of the representations of the senses, are so far from turning the truth of experience into mere illusion, that they are rather the only means of preventing the transcendental illusion, by which Metaphysic has hitherto been deceived, and led to the childish endeavour of catching at bubbles, while phenomena, which are mere representations, were taken for things in themselves—an error which gave occasion to the remarkable Antinomy of Reason that I shall mention by and by, and which is destroyed by the single observation, that phenomenon, as long as it is used in experience, produces truth, but the moment it transgresses the bounds of experience, and consequently becomes transcendent, produces nothing but illusion.

As I therefore leave to things as we obtain them by the senses their actuality, and only limit our sensuous intuition of these things to this, that they represent in no respect, not even in the pure intuitions of space and of time, anything more than mere appearances of those things, but never their constitution in themselves, this is not a thoroughgoing illusion invented for nature by me. My protestation too against all charges of idealism is so valid and clear as even to seem superfluous, were there not incompetent judges, who, while they would have an old name for every deviation from their perverse though common opinion, and never judge of the spirit of philosophic nomenclature, but cling to the letter only, are ready to put their own conceits

in the place of well-determined notions, and thereby deform and distort them. For my having given this my theory the name of transcendental idealism, can authorise no one to confound it with the empirical idealism of Descartes. (Indeed his was only an insoluble problem, owing to which he thought every one at liberty to deny the existence of the corporeal world, as it never could be proved satisfactorily.) Nor [does it justify a confusion] with the mystical and visionary idealism of Berkeley, against which and other similar chimeras our Kritik rather contains the proper antidote. For my idealism concerns not the existence of things (the doubting of which however constitutes idealism in the ordinary sense), since it never came into my head to doubt them,¹ but it concerns the sensuous representation of things, to which space and time especially belong. Of these, consequently of all *phenomena* in general, I have only shown, that they are neither things (nor determinations belonging to things in themselves), but mere species of representation. But the word 'transcendental,' which with me means a reference of our cognition not to things, but only to the *cognitive faculty*, was meant to obviate this misconception. Yet rather than give further occasion to it by this word, I now retract it, and desire this idealism of mine to be called critical. But if it be really an objectionable idealism to convert actual things (not phenomena) into mere representations, by what denomination shall we distinguish that idealism which conversely makes things of mere representations? It may, I think, be called *dreaming* idealism, in contradistinction to the former, which may be called *visionary*, both of which are to be obviated by my transcendental, or, better, *critical* idealism.

¹ I recommend the school of Kuno Fischer to consider this plain utterance. M.

SECOND PART OF THE GENERAL TRANSCENDENTAL PROBLEM

How is the Pure Science of Nature [Physic] possible ?

§ 14. NATURE is the *existence* of things, so far as it is determined according to universal laws. Should nature signify the existence of things *in themselves*, we could never cognise nature either *a priori* or *a posteriori*. Not *a priori*, for how can we know what belongs to things in themselves, since this never can be done by the dissection of our concepts (analytical judgments)? For we do not want to know what is contained in our concept of a thing (for this [content] belongs to its logical being), but what is in the actuality of the thing superadded to our concept, and by what the thing itself is determined in its existence outside the concept. Our understanding, and the conditions on which alone it can connect the determinations of things in their existence, do not prescribe any rule to things themselves; these do not conform to our understanding, but it must conform itself to them; they must therefore be first given us in order to gather these determinations from them, wherefore they would not be cognised *a priori*.

A cognition of the nature of things in themselves *a posteriori* would be equally impossible. For, if experience is to teach us *laws*, to which the existence of things is

subject, these laws, if they regard things in themselves, must belong to them *of necessity* even outside our experience. But experience teaches us what exists and how it exists, but never that it must necessarily exist so and not otherwise. Experience therefore can never teach us the nature of things in themselves.

§ 15. We nevertheless actually possess a pure science of nature in which are propounded, *a priori* and with all the necessity requisite to apodeictical propositions, laws to which nature is subject. I need only call to witness that propaedeutic of Physic which, under the title of the universal Science of Nature, precedes all Physic (which is founded upon empirical principles). In it we have Mathematic applied to phenomena, and also merely discursive principles (or those derived from concepts), which constitute the philosophical part of the pure cognition of nature. But there are several things in it, which are not quite pure and independent of empirical sources : such as the concept of *motion*, that of *impenetrability* (upon which the empirical concept of matter rests), that of *inertia*, and many others, which prevent its being called a perfectly pure science of nature. Besides, it only refers to objects of the external sense, and therefore does not give an example of a universal science of nature, in the strict sense, for such a science must reduce nature in general, whether it regards the object of the external or that of the internal sense (the object of Physic as well as Psychology), to universal laws. But among the principles of this universal Physic there are a few which actually have the required universality ; for instance, the propositions that *substance is permanent*, and that *every event is* always previously *determined by a cause* according to constant laws, etc. These are actually universal laws of nature, which subsist completely *a priori*. There is then in fact a pure

science of nature, and the question arises, *How is it possible?*

§ 16. The word *nature* assumes yet another meaning, which determines the *object*, whereas it (nature) in the former [formal] sense only denotes the *conformity to law* [*Gesetzmässigkeit*] of the determinations of the existence of things generally. Nature then considered *materially* is *the complex of all the objects of experience*. And with this only are we now concerned, for besides, things which can never be objects of experience, if they must be cognised as to their nature, would oblige us to have recourse to concepts whose meaning could never be given *in concreto* (by any example of possible experience). Consequently we must form for ourselves a list of concepts of their nature, the reality whereof—that is, whether they actually refer to objects, or are mere creatures of thought—could never be determined. The cognition of what cannot be an object of experience would be hyperphysical, and concerning this the subject of our present discussion has nothing to say, but only concerns the cognition of nature, the reality of which [cognition] can be confirmed by experience, though it is possible *a priori* and precedes all experience.

§ 17. The *formal* [side] of nature in this narrower sense is therefore the conformity to law of all the objects of experience, and so far as it is cognised *a priori*, their *necessary* conformity. But it has been just shown that the laws of nature can never be cognised *a priori* in objects so far as they are considered not in reference to possible experience, but as things in themselves. And our inquiry here extends not to things in themselves (the properties of which we pass by), but to things as objects of possible experience, and the complex of these is what we properly designate as nature. And now I ask, when the possibility of a cognition of nature

a priori is in question, whether it is better to arrange the problem thus : How could we cognise *a priori* that *things* as objects of experience necessarily conform to law? or thus : How is it possible to cognise *a priori* the necessary conformity to law of *experience* itself as regards all its objects generally?

When examined, the solution of the problem, represented in either way, amounts, with regard to the pure cognition of nature (which is the point of the question at issue), entirely to the same thing. For the subjective laws, under which alone an empirical cognition of things is possible, hold good of these things, as objects of possible experience (not as things in themselves, which are not considered here). It is quite the same whether I say : Without the law, that when an event is perceived, it is always referred to something that precedes, which it follows according to a universal rule, [without this law] a perceptive judgment never can rank as experience ; or whether I express myself thus : All, of which experience teaches that it happens, must have a cause.

It is, however, better to choose the first formula. For we can *a priori* and previous to all given objects have a cognition of those conditions, on which alone experience with regard to such objects is possible, but never of the laws to which they may in themselves be subject, without reference to possible experience. We cannot therefore study the nature of things *a priori* otherwise than by investigating the conditions and the universal (though subjective) laws, under which alone such a cognition as experience (as to mere form) is possible, and we determine accordingly the possibility of things, as objects of experience. For if I should choose the second formula, and seek the conditions *a priori*, on which nature as an *object* of experience is possible, I might easily fall

into error, and fancy that I was speaking of nature as a thing in itself, and then be endlessly toiling in search of laws for things of which nothing is given me.

Consequently we shall here be concerned with experience only, and the universal conditions given *a priori* of its possibility, and we shall thence determine nature as the whole object of all possible experience. I think it will be understood that I here do not mean the rules of the *observation* of a nature that is already given, for these already presuppose experience; that I do not therefore mean how we (by experience) can learn from nature her laws; for these would not then be laws *a priori*, and would yield us no pure science of nature; but [I mean to inquire] how the conditions *a priori* of the possibility of experience are at the same time the sources from which all the universal laws of nature must be derived.

§ 18. We must then in the first place observe that, though all judgments of experience are empirical—that is, have their ground in the immediate perception of the senses—all empirical judgments are not therefore conversely judgments of experience, but that, besides the empirical, and in general besides what is given to the sensuous intuition, particular concepts must yet be superadded—concepts which have their origin quite *a priori* in the pure understanding, and under which every perception must be first of all subsumed and then by their means changed into experience.

Empirical judgments, so far as they have objective validity, are JUDGMENTS OF EXPERIENCE; but those which are only subjectively valid, I name mere JUDGMENTS OF PERCEPTION. The latter require no pure concept of the understanding, but only the logical connexion of perception in a thinking subject. But the former always require,

besides the representation of the sensuous intuition, particular *concepts originally begotten in the understanding*, which produce the objective validity of the judgment of experience.

All our judgments are at first mere perceptive judgments ; they hold good merely for us (that is, for our subject), and we do not till afterwards give them a new reference (to an object), and desire that they shall always hold good for us and alike for everybody else ; for when a judgment agrees with an object, all judgments concerning the same object must likewise agree among themselves, and thus the objective validity of the judgment of experience signifies nothing else than its necessary universality of application. And conversely when we have reason to consider a judgment necessarily universal (which never depends upon perception, but upon the pure concept of the understanding, under which the perception is subsumed), we must consider it objective also, that is, that it expresses not merely a reference of our perception to a subject, but a quality of the object. For there would be no reason for the judgments of other men necessarily agreeing with mine, if it were not the unity of the object to which they all refer, and with which they accord ; hence they must all agree with one another.

§ 19. Objective validity therefore and necessary universality (for everybody) are equivalent notions, and though we do not know the object in itself, yet when we consider a judgment as universal, and also necessary, we understand it to have objective validity. By this judgment we cognise the object (though it remains unknown as it is in itself) by the universal and necessary connexion of the perceptions given to us. As this is the case with all objects of sense, judgments of experience take their objective validity not

from the immediate cognition of the object (which is impossible), but from the condition of universal validity in empirical judgments, which, as already said, never rests upon empirical, or, in short, sensuous conditions, but upon a pure concept of the understanding. The object always remains unknown in itself; but when by the concept of the understanding the connexion of the representations of the object, which are given to our sensibility, is determined as universally valid, the object is determined by this relation, and the judgment is objective.

To illustrate the matter: that the room is warm,¹ sugar sweet, and wormwood bitter—these are merely subjectively valid judgments. I by no means require, that I or every other person shall always find them true as I now do; they only express a reference of two sensations to the same subject, to myself, and that only in my present state of perception; consequently they are not valid of the object; such judgments I have named those of perception. Judgments of experience are of quite a different nature. What experience teaches me under certain circumstances, it must always teach me and everybody, and its validity I do not limit to the subject or to its state at a particular time. Hence I pronounce all such like judgments objectively valid. For instance, when I say the air is elastic, this

¹ I concede at once that these examples do not represent such judgments of perception as ever could become judgments of experience, even though a concept of the understanding were superadded, because they refer merely to feeling, which everybody knows to be merely subjective, and which of course can never be attributed to the object, and consequently never become objective. I only wished at present to give an example of a judgment that is merely subjectively valid, and contains in itself no ground for universal validity, and thereby for a reference to the object. An example of the judgments of perception, which become judgments of experience by superadded concepts of the understanding, will be given in the next note.

judgment is as yet a judgment of perception only—I do nothing but refer two of my sensations to one another. But, if I would have it called a judgment of experience, I require this connexion to stand under a condition, which makes it universally valid. I desire therefore that I and everybody else should always conjoin necessarily the same perceptions under the same circumstances.

§ 20. We must consequently analyse experience in general, in order to see what is contained in this product of the senses and of the understanding, and how the judgment of experience itself is possible. The foundation is conscious intuition, that is, perception (*perceptio*), which pertains merely to the senses. But in the next place, judging also (which belongs only to the understanding) pertains thereto. But this judging may be twofold—first, in that I merely compare perceptions and conjoin them in a consciousness of my [particular] state, or secondly, in that I conjoin them in consciousness generally. The former judgment is merely a judgment of perception, and so far of subjective validity only: it is merely a connexion of perceptions in my [present] mental state, without reference to the object. Hence it is not, as is commonly imagined, enough for experience to compare perceptions and to connect them in consciousness through the [comparative] judgment; there thus arises no universality and necessity of the judgment, by which alone it can be objectively valid and [become] experience.

Quite another judgment therefore is required before perception can become experience. The given intuition must be subsumed under a concept, which determines the form of judging in general relatively to the intuition, connects its empirical consciousness in consciousness generally, and thereby procures universal validity for empirical judgments; a concept of this nature is a pure *a*

priori concept of the Understanding, which does nothing but determine for an intuition the general way in which it can serve for [the process of] judging. Suppose the concept of cause to be such, then it determines the intuition which is subsumed under it, e.g. that of air, relatively to judging in general, so that the concept of air serves, relatively to [its] expanding [itself], in the relation of the antecedent to the consequent in a hypothetical judgment. The concept of cause then is a pure concept of the understanding, which is totally distinct from all possible perception, and only serves to determine the representation contained under it, relatively to judging in general, and so to make a universally valid judgment possible.

Before, therefore, a judgment of perception can become a judgment of experience, it is requisite that the perception should be subsumed under such a concept of the understanding as we have been describing; for instance, air ranks under the concept of causes, which determines our judgment about it in regard to [its] extending [itself] as hypothetical.¹ But this extension [extending] is thereby represented not as merely belonging to my perception of the air in my present state or in many of my states or in the state of perception of others, but as belonging to this perception *of necessity*. So this judgment, 'the air is elastic,' becomes universally valid, and a judgment of experience, only by

¹ As an easier example, we may take the following: 'When the sun shines on the stone, it grows warm.' This judgment, however often I and others may have perceived it, is a mere judgment of perception, and contains no necessity; perceptions are only usually conjoined in this manner. But if I say, 'The sun *warms* the stone,' I add to the perception the understanding-concept [*Verstandesbegriff*] of cause, which *necessarily* connects with the concept of sunshine that of heat, and the synthetical judgment becomes of necessity universally valid, consequently objective, and is converted from a perception into experience [cf. vol. i. p. 116, note].

certain judgments preceding it, which subsume the intuition of air under the concept of cause and effect: and they thereby determine the perceptions not merely as regards one another in me, but relatively to the form of judging in general (here the hypothetical), and in this way they render the empirical judgment universally valid.¹

If all our synthetical judgments are analysed so far as they are objectively valid, it will be found that they never consist of mere intuitions connected only (as is commonly believed) by comparison in a judgment; but that they would be impossible were not a pure concept of the understanding superadded to the concepts abstracted from intuition, under which concept these latter are subsumed, and in this manner only connected in an objectively valid judgment. Even the judgments of pure Mathematic in their simplest axioms are not exempt from this condition. The principle, 'a straight line is the shortest between two points,' presupposes that the line is subsumed under the concept of quantity, which certainly is no mere intuition, but has its seat in the understanding alone, and serves to determine the intuition (of the line) with regard to the judgments which may be made about it, relatively to their quantity, that is, to plurality (as *judicia pluraliva*).² For

¹ In the above difficult paragraph, I have translated *Ausspannung* and *Ausdehnung* in a dynamical and not in a statical sense, according to Dr. Toleken's suggestion. It is certainly an illustration of *obscurum per obscurius*, if taken in any other way. M.

² I prefer this name for the judgments, which are termed *particular* in logic. For the word *particular* seems to imply the notion that they are not universal. But when I begin from unity (in singular judgments) and so proceed to universality, I must not imply any reference to universality: I think of plurality merely without universality, not as its exception. This distinction is necessary, if logical distinctions [*Momente*] are to afford the basis of the pure concepts of the understanding: in logical use the matter is not worth changing.

under them it is understood that in a given intuition there is contained a plurality of homogeneous parts.

§ 21. In order therefore to show the possibility of experience so far as it rests upon pure concepts of the understanding *a priori*, we must first represent what belongs to judging generally, and the various phases [*Momente*] of the understanding in [performing] it, in a complete table. For the pure understanding-concepts must run parallel to these phases, as such concepts are nothing more than concepts of intuitions in general, so far as these are determined by one or other of these ways of judging, in themselves, that is, necessarily and universally. Hereby also the *a priori* principles of the possibility of all experience, as of an objectively valid empirical cognition, will be precisely determined. For they are nothing but propositions by which all perception is (under certain universal conditions of intuition) subsumed under those pure concepts of the understanding.

Logical Table of Judgments.

1.	2.
<i>As to Quantity.</i>	<i>As to Quality.</i>
Universal.	Affirmative.
Particular [plurative].	Negative.
Singular.	Infinite.
3.	4.
<i>As to Relation.</i>	<i>As to Modality.</i>
Categorical.	Problematical.
Hypothetical.	Assertorial.
Disjunctive.	Apodeictical.

Transcendental Table of the Pure Concepts of the Understanding.

1.	2.
<i>As to Quantity.</i>	<i>As to Quality.</i>
Unity (the Measure).	Reality.
Plurality (the Quantity).	Negation.
Totality (the Whole).	Limitation.
3.	4.
<i>As to Relation.</i>	<i>As to Modality.</i>
Substance.	Possibility.
Cause.	Existence.
Community.	Necessity.

Pure Physiological Table of the Universal Principles of the Science of Nature.

1.	2.
Axioms of Intuition.	Anticipations of Perception.
3.	
Analogies of Experience.	
4.	
Postulates of Empirical Thinking generally.	

§ 21a. In order to comprise the whole matter in one notion, it is first necessary to remind the reader that we are discussing not the origin of experience, but of that which lies in experience. The former pertains to empirical psychology, and would even then never be adequately

explained without the latter, which belongs to the Kritik of cognition, and particularly of the understanding.

Experience consists of intuitions, which pertain to the sensibility, and of judgments, which are entirely a work of the understanding. But the judgments, which the understanding forms entirely from sensuous intuitions, are far from being judgments of experience. For in the one case the judgment connects only the perceptions as they are given in the sensuous intuition, but in the other the judgments are to express what experience in general, and not what the mere perception, with its subjective validity, contains. The judgment of experience must therefore add to the sensuous intuition and its logical connexion in a judgment (after it has been made universal by comparison) something that determines the synthetical judgment as necessary and therefore as universally valid. This can be nothing else than that concept which represents the intuition as determined in itself with regard to one form of judgment rather than another,¹ which [form] is a concept of that synthetical unity of intuitions which can only be represented by a given logical function of judgments.

§ 22. The sum of the matter is this: the business of the senses is to intuite—that of the understanding is to think. But thinking means uniting representations in one consciousness. This union is either merely relative to the [individual] subject, and is contingent and subjective, or is absolute, and is necessary or objective. The union of representations in one consciousness is judgment. Thinking therefore is the same as judging, or referring representations to judgments in general. Hence judgments are either merely subjective, when representations are referred

¹ I read *anderen*, being unable to translate *andere* of Rosenkrantz's Edition. M.

to a consciousness in one subject only, and united in it, or objective, when they are united in a consciousness generally, that is, necessarily. The logical phases of all judgments are but various modes of uniting representations in consciousness. But if they serve for concepts, they are concepts of their *necessary* union in a consciousness, and so principles of objectively valid judgments. This union in a consciousness is either analytical, by identity, or synthetical, by the combination and addition of various representations one to another. Experience consists in the synthetical connexion of phenomena (perceptions) in consciousness, so far as this connexion is necessary. Hence the pure concepts of the understanding are those under which all perceptions must be subsumed ere they can serve for judgments of experience, in which the synthetical unity of the perceptions is represented as necessary and universally valid.¹

§ 23. So far as judgments are merely considered the condition of the union of given representations in a consciousness, they are rules. These rules, so far as they represent the union as necessary, are rules *a priori*, and so far as they cannot be deduced from higher rules, are

¹ But how does this proposition, 'that judgments of experience contain necessity in the synthesis of perceptions,' agree with my statement so often before inculcated, that 'experience as cognition *a posteriori* can afford contingent judgments only?' When I say that experience teaches me something, I mean [by experience] only the perception that lies in it—for example, that heat always follows the shining of the sun on a stone; consequently the proposition of experience is always so far contingent. That this heat necessarily follows the shining of the sun is contained indeed in the judgment of experience (by means of the concept of cause), yet is a fact not learned by experience; for conversely, experience is first of all generated by this addition of the concept of the understanding (of cause) to perception. How perception attains this addition may be seen by referring in the *Kritik* itself to the section on the Transcendental faculty of Judgment [vol. i. pp. 144 *sqq.*]

fundamental principles. But in regard to the possibility of all experience, merely in relation to the form of thinking in it, no conditions of experience-judgments are higher than those which bring the phenomena, according to the various form of their intuition, under pure concepts of the understanding, and render the empirical judgment objectively valid. These concepts are therefore the *a priori* principles of possible experience.

The principles of possible experience are then at the same time universal laws of nature, which can be cognised *a priori*. And thus the problem in our second question, *How is the pure Science of Nature possible?* is solved. For the system which is required for the form of a science is to be met with in perfection here, because, beyond the above-mentioned formal conditions of all judgments in general (viz. of all the general rules of logic), no others are possible, and these constitute a logical system. The concepts grounded thereupon, which contain the *a priori* conditions of all synthetical and necessary judgments, accordingly constitute a transcendental system. Finally the principles, by means of which all phenomena are subsumed under these concepts, constitute a physiological system, that is, a system of nature, which precedes all empirical cognition of nature, makes it even possible, and hence may in strictness be denominated the universal and pure science of nature.

§ 24. The first¹ of the physiological principles subsumes all phenomena, as intuitions in space and time, under the concept of *Quantity*, and is so far a principle of the application of Mathematic to experience. By the second

¹ Without referring to what the *Kritik* itself says on the subject of the Principles, the three following paragraphs will not be well understood ; they may, however, be of service in giving a general view of the Principles, and in fixing the attention on the main points.

that which is empirical, or sensation, which denotes what is real in intuitions, is not indeed directly subsumed under the concept of *quantity*, because sensation is not an intuition that *contains* either space or time, though it places the object related to itself in both. But still there is between reality (sensible representation) and nothing, or the total void of intuition in time, a difference which has a quantity. For between every given degree of light and of darkness, between every degree of heat and of absolute cold, between every degree of weight and of absolute lightness, between every degree of occupied space and of totally void space, diminishing degrees can be conceived, in the same manner as between consciousness and total unconsciousness (psychological obscurity) ever diminishing degrees find their place. Hence there is no perception that can prove an absolute want; for instance, no psychological obscurity that cannot be considered as a [weaker] consciousness, which is only outbalanced by a stronger consciousness. This occurs in all cases of sensation, and so the understanding can anticipate even sensations, which constitute the peculiar quality of empirical representations (phenomena), by means of this principle: that they all have (consequently that what is real in all phenomena has) a degree. Here is the second application of Mathematic (*mathesis intensorum*) to the science of nature.

§ 25. As to the Relation of phenomena, and indeed merely with a view to their existence, the determination is not mathematical, but dynamical, and can never be objectively valid, consequently never fit for experience, if it does not come under *a priori* principles by which the cognition of experience relative to phenomena becomes even possible. Hence phenomena must be subsumed under the concept of Substance, which is the foundation of all deter-

mination of existence, as a concept of the thing itself; or secondly—so far as a succession is found among phenomena, that is, an event—under the concept of an Effect with reference to Cause; or lastly—so far as coexistence is to be known objectively, that is, by a judgment of experience—under the concept of Community (action and reaction). Thus *a priori* principles form the basis of objectively valid, though empirical judgments, that is, of the possibility of experience so far as it must connect objects as existing in nature. These principles are the proper laws of nature, which may be termed dynamical.

And finally the cognition of the agreement and connexion not only of phenomena among themselves in experience, but of their relation to experience in general, belongs to the judgments of experience. This relation [concerns] either their agreement with the formal conditions, which the understanding cognises, or their coherence with the materials of the senses and of perception, or combines both into one concept. Consequently it contains Possibility, Actuality, and Necessity according to universal laws of nature; and this constitutes the physiological doctrine of method, or the distinction of truth and of hypotheses, and the bounds of the certainty of the latter.

§ 26. Yet it is not by any means the greatest merit of this third table of Principles drawn *from the nature of the understanding itself* after the critical method, that it shows an inherent perfection, which raises it far above every other, that has hitherto though in vain been tried or may yet be tried by analysing *things themselves* dogmatically. Nor is it [the chief merit] that the table exhibits all synthetical *a priori* principles completely and on one principle, viz. the faculty of judging in general, which constitutes the essence of experience as regards the understanding, so that we can

be certain that there are no more such like principles—a satisfaction which the dogmatical method never can afford.

The ground of proof must be carefully noticed, as it shows the possibility of this cognition *a priori*, and at the same time limits all such principles to a condition, which must never be forgotten, if we desire them not to be misunderstood, and extended in use beyond the original sense which the understanding attaches to them. This limit is, that they contain nothing but the conditions of possible experience in general so far as it is subjected to laws *a priori*. Consequently I do not say, that things *in themselves* possess a quantity, [that] their reality [has] a degree, their existence a connexion of accidents in a substance, etc. ; for this nobody can prove, because such a synthetical connexion from mere concepts, without any reference to sensuous intuition on the one side, or connexion of it in a possible experience on the other, is absolutely impossible. The essential limitation of the concepts in these principles then is: That all things stand necessarily *a priori* under the afore-mentioned conditions, *as objects of experience only*.

Hence there follows secondly a specifically peculiar mode of proof of these principles: That they are not referred directly to phenomena and their relation, but to the possibility of experience, of which phenomena constitute the matter only, not the form. Thus they are referred to objectively and universally valid synthetical propositions, in which [features] judgments of experience are distinguished from those of perception. This takes place because phenomena, as mere intuitions, *which occupy a part of space and time*, come under the concept of Quantity, which unites their multiplicity *a priori* according to rules synthetically. Again, so far as the perception contains, besides intuition,

sensation, between which and nothing, or its total disappearance, a transition by diminishing always occurs, what is real in phenomena must have a Degree, so far as it does not itself *occupy any part of space or of time*.¹ Still the transition to it from empty time or space is only possible in time; consequently though sensation, as the quality of empirical intuition, can never be cognised *a priori*, by its specific difference from other sensations, yet it can, in a possible experience in general, as a quantity of perception be intensively distinguished from every other similar perception. Hence then the application of Mathematic to nature is rendered possible and determined, as regards the sensuous intuition by which nature is given to us.

But the reader must above all pay attention to the mode of proof of the principles which occur under the title of Analogies of experience. For these do not regard the generation of intuitions, like the principles of the application of mathematic to the science of nature generally, but regard the connexion of their existence in experience. This [connexion] can be nothing but the determination of their existence in time according to necessary laws, under which alone the connexion is objectively valid, and consequently becomes experience. The proof therefore does not turn on

¹ Heat and light are in a small space just as large (as to degree) as in a large one; in like manner the internal representations, pain, consciousness in general, whether they last a short or a long time, need not vary as to the degree. Hence the quantity is here in a point and in a moment just as great as in any space or time however great. Degrees are therefore capable of increase, but not in intuition, rather in mere sensation (or the quantity of the degree of an intuition). Hence they can only be estimated quantitatively by the relation of 1 to 0—that is, by their capability of decreasing by infinite intermediate degrees to disappearance, or of increasing from nought through infinite gradations to a determinate sensation in a certain time. *Quantitas qualitatis est gradus.*

the synthetical unity in the connexion of *things* in themselves, but of *perceptions*, and of these not in regard to their matter, but to the determination of time and of the relation of their existence in it, according to universal laws. These universal laws, therefore, if the empirical determination in relative time is to be objectively valid (*i.e.* to be experience), contain the necessary determination of existence in time generally (consequently according to a rule of the understanding *a priori*). The reader has probably been long accustomed to consider experience a mere empirical synthesis of perceptions, and hence not to reflect that it goes much farther than these extend, as it gives empirical judgments universal validity, and for that purpose requires a pure unity of the understanding, which precedes *a priori*. In Prolegomena on this subject I can only recommend such readers to pay great attention to this distinction of experience from a mere aggregate of perceptions, and to judge the mode of proof from this point of view.

§ 27. This is the proper place to remove Hume's difficulty. He justly maintains, that we can by no means see by reason the possibility of Causality, that is, of the reference of the existence of one thing to the existence of another, which is necessitated by the former. I add, that we comprehend just as little the concept of Subsistence, that is, the necessity that at the foundation of the existence of things there lies a subject which cannot itself be a predicate of any other thing; nay, we cannot even form a notion of the possibility of such a thing (though we can point out examples of its use in experience). The very same incomprehensibility affects the Community of things, as we cannot comprehend how from the state of one thing an inference to the state of quite another thing beyond it, and *vice versa*, can be drawn, and how substances which have each their own separate

existence should depend upon one another necessarily. But I am very far from holding these concepts to be derived merely from experience, and the necessity represented in them, to be imaginary and a mere illusion produced in us by long habit. On the contrary, I have amply shown, that they and the principles [derived] from them are firmly established *a priori*, or before all experience, and have their undoubted objective value, though only with regard to experience.

§ 28. I have indeed no notion of such a connexion of things in themselves, that they can either exist as substances, or act as causes, or stand in community with others (as parts of a real whole), and I can just as little conceive such properties in phenomena as such, because those concepts contain nothing that lies in the phenomena, but what the understanding alone must think. But we have a concept of such a connexion of representations in our understanding, and in judgments generally — a concept that representations appear in one sort of judgments as subject in relation to predicate, in another as reason in relation to consequence, and in a third as parts, which constitute together a total possible cognition. Besides we cognise *a priori* that, without considering the representation of an object as determined in some of these respects, we can have no valid cognition of the object, and, if we should occupy ourselves about the object *per se*, there is no possible attribute, by which I could know that it is determined under any of these aspects, that is, under the concept either of substance, or of cause, or (in relation to other substances) of community, for I have no notion of the possibility of such a connexion of existence [*per se*]. But the question is not how things in themselves, but how the empirical cognition of things is determined, as regards the above aspects of judgments in general, that is, how things, as objects of

experience, can and shall be subsumed under these concepts of the understanding. And then it is clear, that I completely comprehend not only the possibility, but also the necessity of subsuming all phenomena under these concepts, that is, of using them for principles of the possibility of experience.

§ 29. Let us make an experiment with Hume's problematical concept (his *crux metaphysicorum*), the concept of cause. In the first place I am given *a priori*, by means of logic, the form of a conditional judgment in general, that is, one given cognition as antecedent and another as consequent. But it is possible, that in perception we may meet with a rule of relation, which runs thus : that a certain phenomenon is constantly followed by another (though not conversely), and this is a case for me to use the hypothetical judgment, and, for instance, to say, if the sun shines long enough upon a body, it grows warm. Here there is indeed as yet no necessity of connexion, or concept of cause. But I proceed and say, that if the [above] proposition, which is merely a subjective connexion of perceptions, is to be a judgment of experience, it must be considered as necessary and universally valid. Such a proposition would be, 'the sun is by its light the cause of heat.' The empirical rule is now considered as a law, and as valid not merely of phenomena, but valid of them for the purposes of a possible experience which requires thoroughly and therefore necessarily valid rules. I therefore easily comprehend the concept of cause, as a concept necessarily belonging to the mere form of experience, and its possibility as a synthetical union of perceptions in consciousness generally ; but I do not at all comprehend the possibility of a thing generally as a cause, because the concept of cause denotes a condition not at all belonging to things, but to experience. It is nothing in

fact but an objectively valid cognition of phenomena and of their succession, so far as the antecedent can be conjoined with the consequent according to the rule of hypothetical judgments.

§ 30. Hence the pure concepts of the understanding, if they quit objects of experience and would refer to things in themselves, (*noumena*) have no signification whatever. They serve, as it were, only to spell phenomena, that we may be able to read them as experience ; the principles which arise from their reference to the sensible world, only serve our understanding for empirical use. Beyond this they are arbitrary combinations, without objective reality, and we can neither cognise their possibility *a priori*, nor verify their reference to objects or make it intelligible by any example ; because examples can only be borrowed from some possible experience, consequently the objects of these concepts can be found nowhere but in a possible experience.

This complete (though to its originator unexpected) solution of Hume's problem preserves therefore to the pure concepts of the understanding their *a priori* origin, and to the universal laws of nature their validity, as laws of the understanding, yet so that their use is limited to experience, because their possibility depends solely on the reference of the understanding to experience ; but not by deriving them from experience, but by deriving it from them, a completely reversed mode of connexion which never occurred to Hume.

This is therefore the result of all our foregoing inquiries : all synthetical principles *a priori* are nothing more than principles of possible experience, and can never be referred to things in themselves, but to phenomena as objects of experience. And hence pure mathematic as well as pure physic can never be referred to anything more than mere phenomena, and can only represent either that which makes

experience generally possible, or else that which, as it is derived from these principles, must always be capable of being represented in some possible experience.

§ 31. And thus we have at last something definite, upon which to depend in all metaphysical undertakings, which have hitherto attempted everything without distinction boldly enough but always at random. It never struck dogmatical thinkers, that the aim of their exertions should be so proximate. It never struck even those, who, confident in their supposed sound common sense, started with concepts and principles of pure reason (which were legitimate and natural, but destined for mere empirical use) in quest of fields of knowledge [*Einsichten*], to which they neither knew nor could know any determinate bounds, because they had never reflected nor were able to reflect on the nature or even on the possibility of such a pure understanding.

Many a naturalist of pure reason (by which I mean the man who believes he can decide in matters of Metaphysic without any science) may pretend, that he long ago by the prophetic spirit of his sound sense, not only suspected, but knew and comprehended, what is here propounded with so much ado, or, if he likes, with prolix and pedantic pomp: 'that with all our reason we can never reach beyond the field of experience.' But when he is questioned about his rational principles individually, he must grant, that there are many of them which he has not taken from experience, and which are therefore independent of it and valid *a priori*. How then and on what grounds will he restrain both himself and the dogmatist, who makes use of these concepts and principles beyond all possible experience, because they are recognised independent of it? And even he, this adept in sound sense, in spite of all the cheaply acquired wisdom

he arrogates to himself, is not so secure from [the danger of] wandering insensibly beyond objects of experience into the field of chimeras. He too is often deeply enough involved in them, though he gives a colour to his groundless pretensions by his popular language, in which he announces everything as mere probability, rational conjecture, or analogy.

§ 32. Since the oldest days of philosophy inquirers into pure reason have conceived, besides the things of sense, or appearances (*phenomena*), which make up the sensible world, certain objects of the understanding¹ (*noumena*), which should constitute an intelligible world. And as appearance and illusion were by those men identified (a thing which we may well excuse in an undeveloped epoch), actuality was only conceded to the noumena.

And we indeed, when, as is reasonable, we consider objects of sense as mere appearances, hereby confess that they are based upon a thing in itself, though we know not this thing as to its internal constitution, but only know its phenomena, viz. : the way in which our senses are affected by this unknown something. The understanding therefore, by assuming phenomena, grants the existence of things in themselves also, and so far we may say, that the representation of such beings as form the basis of phenomena, consequently of mere beings of the understanding, is not only admissible, but unavoidable.

Our critical deduction by no means excludes beings of that sort (*noumena*), but rather limits the principles of the Aesthetic to this, that they shall not extend to all things, as everything would then be turned into mere phenomenon, but that they shall only hold good of objects of possible experience. Hereby then objects of the understanding are

¹ *Verstandeswesen*, using *object* in its vaguest sense. M.

granted, but with the inculcation of this rule which admits of no exception : 'that we neither know nor can know anything at all determinate of these pure objects of the understanding, because our pure concepts of the understanding as well as our pure intuitions extend to nothing but objects of possible experience, consequently to mere things of sense, and as soon as we leave this sphere these concepts retain no meaning whatever.'

§ 33. There is indeed something seductive in our pure concepts of the understanding, which tempts us to a transcendent use ; I mean the use which transcends all possible experience. Not only are our concepts of substance, of power, of action, of reality, and others, quite independent of experience, containing no phenomenon of sense, and so apparently applicable to things in themselves (*noumena*), but (which strengthens this presumption), they contain a necessity of determination in themselves, which experience never attains. The concept of cause implies a rule, according to which one state follows another necessarily ; but experience can only show us, that one state of things often, or at most, commonly, follows another, and therefore affords neither strict universality, nor necessity.

Hence the Categories seem to have a deeper meaning and import than can be exhausted by their empirical use, and so the understanding insensibly adds for itself to the house of experience a much more extensive wing, which it fills with nothing but creatures of thought, without ever observing that it has transgressed with its otherwise lawful concepts the bounds of their use.

§ 34. I was obliged therefore to institute two important, and even indispensable, though very dry investigations. In the one (*Kritik*, p. 107) it is shown, that the senses furnish not the pure concepts of the understanding *in concreto*, but

only the *schema* for their use, and that the object conformable to it occurs only in experience (as the production of the understanding from materials of the sensibility). In the other (*Kritik*, p. 178) it is shown, that, although our pure concepts of the understanding and our principles are independent of experience, and despite the apparently greater sphere of their use, still nothing whatever can be thought by them beyond the field of experience, because they can do nothing but merely determine the logical form of the judgment relatively to given intuitions. But as there is no intuition at all beyond the field of the sensibility, these pure concepts, as they cannot possibly be exhibited *in concreto*, are [then] totally without meaning; consequently all these *noumena*, together with their complex, the intelligible world,¹ are nothing but representation of a problem, of which the object in itself is possible, but the solution, from the nature of our understanding, totally impossible. For our understanding is not a faculty of intuition, but of the connexion of given intuitions in experience. Experience must therefore contain all the objects for our concepts; but beyond it no concepts have any signification, as there is no intuition for their basis.

§ 35. The imagination may perhaps be forgiven for occasional extravagance, and for not keeping carefully within the limits of experience, since it at least gains life and vigour by such flights, and since it is always easier to moderate its

¹ Not (as the usual expression is) *intellectual* world. For *cognitions* are *intellectual* through the understanding, and refer to our world of sense also; but *objects*, so far as they can be represented *merely by the understanding*, and to which none of our sensible intuitions can refer, are termed *intelligible*. But as some possible intuition must correspond to every object, we must conceive an understanding that intuits things immediately; but of such we have not the least notion, nor have we of the *things of understanding* [Verstandeswesen], to which it should be applied.

boldness, than to stimulate its languor. But the understanding which ought to *think* can never be forgiven for substituting *extravagance* ; for we depend upon it alone for assistance to set bounds, when necessary, to the extravagance of the imagination.

But the understanding begins its vagaries very innocently and modestly. It first separates the elementary cognitions, which inhere in it prior to all experience, but yet must always have their application in experience. It gradually drops these limits, and what is there to prevent it, as it has quite freely derived its principles from itself? And then it proceeds first to newly-imagined powers in nature, then to beings outside nature ; in short to a world, for whose construction the materials cannot be wanting, because fertile fiction furnishes them abundantly, and though not confirmed, is never refuted, by experience. This is the reason that young thinkers are so partial to Metaphysic of the truly dogmatical kind, and often sacrifice to it their time and their talents, which might be otherwise better employed.

But there is no use in trying to moderate these fruitless endeavours of pure reason by all manner of cautions as to the difficulties of solving questions so occult, by complaints of the limits of our reason, and by degrading our assertions into mere conjectures. For, if their *impossibility* is not distinctly shown, and the *self-knowledge* of reason does not become a true science, in which the field of its right use is distinguished, so to say, with mathematical certainty from that of its worthless and idle use, these fruitless efforts will never be fully abandoned.

§ 36. *How is Nature itself possible?*

This question — the highest point that transcendental philosophy can ever reach, and to which, as its boundary and completion, it must proceed — properly contains two [subordinate] questions.

FIRST: How is nature at all possible in the *material* sense, as to intuition, [I mean nature] considered as the complex of phenomena; how are space, time, and that which fills both — the object of sensation, in general possible? The answer is: By means of the constitution of our Sensibility, according to which it is specifically affected by objects, which are in themselves unknown to it, and totally distinct from those phenomena. This answer is given in the *Kritik* itself in the transcendental Aesthetic, and in these *Prolegomena* by the solution of the first general problem.

SECONDLY: How is nature possible in the formal sense, nature as the complex of the rules, under which all phenomena must come, in order to be thought as connected in experience? The answer must be this: It is only possible by means of the constitution of our Understanding, according to which all the above representations of the sensibility are necessarily referred to a consciousness, and by which the peculiar way in which we think (that is, by rules), and hence experience also, are possible, but this must be clearly distinguished from an insight into the objects in themselves. This answer is given in the *Kritik* itself in the transcendental Logic, and in these *Prolegomena*, in the course of the solution of the second main problem.

But how this peculiar property of our sensibility itself is possible, or that of our understanding and of the apperception which is necessarily its basis and that of all thinking — this cannot be further resolved or answered, because we

require these [faculties] for all our answers and for all our thinking about objects.

There are many laws of nature, which we can only know by means of experience ; but conformity to law in the connexion of phenomena, that is, nature in general, we cannot discover by any experience, because experience itself requires laws, which are *a priori* at the basis of its possibility.

The possibility of experience in general is therefore at the same time the universal law of nature, and the principles of the former (experience) are the very laws of the latter (nature). For we do not know nature but as the complex of the phenomena, that is, of representations in us, and hence can only derive the laws of its connexion from the principles of their connexion in us, that is, from the conditions of their necessary union in consciousness, which union constitutes the possibility of experience.

Even the main proposition expounded throughout this section—that universal laws of nature can be distinctly cognised *a priori*—leads naturally to the proposition: that the highest legislation of nature must lie in ourselves (that is, in our understanding), and that we must not seek the universal laws of nature in nature by means of experience, but conversely must seek nature, as to its universal conformity to law, in the conditions of the possibility of experience, which lie in our sensibility and in our understanding. For how were it otherwise possible to know *a priori* these laws, as they are not rules of analytical cognition, but really synthetical extensions of it? Such a necessary agreement of the principles of possible experience with the laws of the possibility of nature, can only proceed from one of two reasons: either these laws are drawn from nature by means of experience, or conversely nature is derived from the laws of the possibility of experience in general, and is quite the same as the

mere universal conformity to law of the latter. The former is self-contradictory, for the universal laws of nature can and must be cognised *a priori* (that is, independent of all experience), and be the foundation of all empirical use of the understanding; the latter alternative therefore alone remains.¹

But we must distinguish the empirical laws of nature, which always presuppose particular perceptions, from the pure or universal laws of nature, which, without being based on particular perceptions, contain merely the conditions of their necessary union in experience. In relation to the latter, nature and *possible* experience are quite the same, and as the conformity to law here depends upon the necessary connexion of phenomena in experience (without which we cannot cognise any object whatever in the sensible world), consequently upon the original laws of the understanding, it seems at first strange, but is not the less certain, to say as regards the latter: *The understanding does not draw its laws (a priori) from nature, but prescribes them to it.*

§ 37. We shall illustrate this apparently daring proposition by an example, which will show, that laws, which we discover in objects of sensuous intuition (especially when these laws are cognised as necessary), are commonly held by us to be such as the understanding has placed in them, though they are similar in all points to the laws of nature, which we ascribe to experience.

¹ Crusius alone thought of a compromise: that a Spirit, who can neither err nor deceive, implanted these laws in us originally. But since false principles often intrude themselves, as indeed the very system of this man shows in not a few examples, we are involved in difficulties as to the use of such a principle in the absence of sure criteria to distinguish the genuine origin from the spurious, as we never can know certainly what the Spirit of truth or the father of lies may have instilled into us.

§ 38. If we consider the properties of the circle, by which this figure unites so many arbitrary determinations of space in itself, and therefore in a universal rule, we cannot avoid attributing a nature to this geometrical thing. Two right lines, for example, which intersect one another and the circle, however they may be drawn, are always divided so that the rectangle under the segments of the one is equal to that under the segments of the other. The question now is: Does this law lie in the circle or in the understanding, that is, Does this figure, independently of the understanding, contain in itself the ground of the law, or does the understanding, having constructed according to its concepts (according to the equality of the radii) the figure itself, introduce into it this law of the chords cutting one another in geometrical proportion? When we follow the proofs of this law, we soon perceive, that it can only be derived from the condition on which the understanding founds the construction of this figure, and which is that of the equality of the radii. But, if we enlarge this concept, to pursue further the unity of various properties of geometrical figures under common laws, and consider the circle as a conic section, which of course is subject to the same fundamental conditions of construction as other conic sections, we shall find, that all the chords, which intersect within the ellipse, parabola, and hyperbola, always intersect so that the rectangles under their segments are not indeed equal, but always bear a constant ratio to one another [the directions of the chords being fixed]. If we proceed still farther, to the fundamental laws of physical astronomy, we find a physical law of reciprocal attraction diffused over all material nature, the rule of which attraction is: 'that it decreases inversely as the square of the distance from each attracting point, that is, as the spherical surfaces, over which

this power diffuses itself—'increase,' which law seems to be necessarily inherent in the very nature of things, and hence is usually propounded as cognisable *a priori*. Simple as the sources of this law are, merely resting upon the relation of spherical surfaces of different radii, its consequences are so valuable with regard to the variety of their agreement and its regularity, that not only are all possible orbits of the celestial bodies conic sections, but such a relation of these orbits to each other results, that no other law of attraction, than that of the inverse square of the distance, can be imagined as fit for a cosmical system.

Here then is a Nature that rests upon laws which the understanding cognises *a priori*, and chiefly from the universal principles of the determination of space. And the question now is: Do the laws of nature lie in space, and does the understanding learn them by merely endeavouring to find out the fruitful meaning that lies in space; or do they inhere in the understanding and in the way in which it determines space according to the conditions of the synthetical unity in which its concepts are all centred? Space is something so uniform and as to all particular properties so indeterminate, that we should certainly not seek a store of laws of nature in it. Whereas that which determines space to the form of a circle or to the figures of a cone and a sphere, is the understanding, so far as it contains the ground of the unity of their constructions. The mere universal form of intuition, called space, must therefore be the substratum of all intuitions determinable to particular objects, and in it of course the condition of the possibility and of the variety of these intuitions lies. But the unity of the objects is entirely determined by the understanding, and on conditions which lie in its own nature; and thus the understanding is the origin of the universal order

of nature, in that it comprehends all appearances under its own laws, and thereby first constructs, *a priori*, experience (as to its form), by means of which whatever is to be cognised only by experience, is subjected to its laws necessarily. For we are not now concerned with the nature of things in themselves, which is independent of the conditions both of our sensibility and our understanding, but with nature, as an object of possible experience, and in this case the understanding, whilst it makes experience possible, thereby insists that the sensuous world is either not an object of experience at all, or must be Nature.

APPENDIX TO THE PURE SCIENCE OF NATURE

§ 39. *Of the System of the Categories.*

THERE can be nothing more desirable to a philosopher, than to be able to derive the scattered multiplicity of the concepts or the principles, which had occurred to him in concrete use, from a principle *a priori*, and to unite everything in this way in one cognition. He formerly only believed that those things, which remained after a certain abstraction, and seemed by comparison among one another to constitute a particular kind of cognitions, were completely collected ; but this was only an *Aggregate*. Now he knows, that just so many, neither more nor less, can constitute the mode of cognition, and perceives the necessity of his division, which is a [mental] comprehension ; and now only he has attained a *System*.

To search in common cognition for the concepts, which do not rest upon particular experience, and yet occur in all cognition of experience, in which they as it were constitute the mere form of connexion—to do this presupposes neither greater reflection nor deeper insight, than to detect in a language the rules of the actual use of words generally, and thus to collect elements for a grammar. In fact both researches are very nearly related, even though we are not able to give a reason why each language has just this and

no other formal constitution, and still less why an exact number of such formal determinations in general are found in it.

Aristotle collected ten pure elementary concepts under the name of Categories.¹ To these, which are also called predicaments, he found himself obliged afterwards to add five post-predicaments,² some of which however (*prius*, *simul*, and *motus*) are contained in the former; but this random collection must rather be considered (and commended) as a hint for future inquirers, than as a regularly developed idea, and hence it has, in the present more advanced state of philosophy, been rejected as quite useless.

After long reflection on the pure elements of human knowledge (those which contain nothing empirical), I at last succeeded in distinguishing with certainty and in separating the pure elementary notions of the Sensibility (space and time) from those of the Understanding. Thus the 7th, 8th, and 9th Categories are excluded from the old list. And the others were of no service to me; because there was [in Aristotle's mind] no principle, on which the understanding could be fully investigated, and all the functions, whence its pure concepts arise, determined completely and with precision.

But in order to discover such a principle, I looked about for an act of the understanding which comprises all the rest, and is distinguished only by various modifications or phases, in reducing the multiplicity of representation to the unity of thinking in general: I found this act of the understanding to consist in judging. Here then the labours of the logicians were ready at hand, though not yet quite

¹ 1. *Substantia*. 2. *Qualitas*. 3. *Quantitas*. 4. *Relatio*. 5. *Actio*. 6. *Passio*. 7. *Quando*. 8. *Ubi*. 9. *Situs*. 10. *Habitus*.

² *Oppositum*. *Prius*. *Simul*. *Motus*. *Habere*.

free from defects, and with this help I was enabled to exhibit a complete table of the pure functions of the understanding, which are however undetermined in regard to any object. I finally referred these functions of judging to objects in general, or rather to the condition of determining judgments as objectively valid, and so there arose the pure concepts of the understanding, concerning which I could make certain, that these, and this exact number only, constitute our whole cognition of things from pure understanding. I was justified in calling them by their old name, *Categories*; while I reserved for myself the liberty of adding, under the title of *Predicables*, a complete list of all the concepts deducible from them, by combinations whether among themselves, or with the pure form of the phenomenon (space or time), or with its matter, so far as it is not yet empirically determined (the object of sensation in general). This should be done as soon as a system of transcendental philosophy, towards which I am at present only contributing by the *Kritik of the Reason* itself, comes to be constructed.

Now the essential point in this system of Categories, which distinguishes it from the old random collection without principle, and for which alone it deserves to be considered as philosophy, consists in this: that by means of it the true signification of the pure concepts of the understanding and the condition of their use could be precisely determined. For here it became obvious that they are themselves nothing but logical functions, and as such do not produce the least concept of an object, but require sensuous intuition as a basis. They therefore only serve to determine empirical judgments, which are otherwise undetermined and indifferent as regards all functions of judging, relatively to these functions, thereby procuring

them universal validity, and by means of them making *judgments of experience* in general possible.

Such an insight into the nature of the categories, which limits them at the same time to the mere use of experience, never occurred either to their first author, or to any of his successors; but without this insight (which immediately depends upon their derivation or deduction), they are quite useless and only a miserable list of names, without explanation or rule for their use. Had the ancients ever conceived such a notion, doubtless the whole study of the pure rational knowledge, which under the name of Metaphysic has for centuries spoiled many a sound mind, would have reached us in quite another shape, and would have enlightened the human understanding, instead of actually exhausting it in obscure and vain subtilties, and rendering it unfit for true science.

Again: this system of categories makes all treatment of every object of pure reason itself systematic, and affords a direction or clue how and through what points of inquiry every metaphysical consideration must proceed, in order to be complete; for it exhausts all the momenta of the understanding, among which every concept must be classed. In like manner the table of Principles found its origin, the completeness of which we can only vouch for by the system of the categories; and even in the division of the concepts,¹ which must go beyond the physiological use of the understanding, it is the very same clue, which, as it must always be carried through the same fixed points determined *a priori* in the human understanding, always forms a closed circle; so that there is no doubt that the object of a pure understanding or of a rational-concept, so far as it is to be estimated philosophically and on *a priori*

¹ *Kritik*, pp. 207 and 257.

principles, can in this way be completely cognised. I could not therefore omit to make use of this clue with regard to one of the most abstract ontological divisions, the various distinctions of the *notions of something and of nothing*, and to construct accordingly (*Kritik*, p. 207) a regular and necessary table of their divisions.¹

And this system, like every other true one founded on a universal principle, shows its inestimable value in this, that it excludes all foreign concepts, which might otherwise intrude among the pure concepts of the understanding, and determines the place of every cognition. Those concepts, which under the name of *concepts of reflection* have been likewise arranged in a table, according to the clue of the categories, intrude themselves, without leave or right, among the pure concepts of the understanding in Ontology, though these are concepts of connexion, and thereby of the objects themselves, whereas the former are only concepts of the

¹ Many neat observations may be made on the table of the categories, for instance: (1) that the third arises from the first and the second joined in one concept; (2) that in those of Quantity and of Quality there is merely a progress from unity to totality or from something to nothing (for this purpose the categories of Quality must stand thus: reality, limitation, total negation), without *correlata* or *opposita*, whereas those of Relation and of Modality carry such with them; (3) that, as in *Logic* categorical judgments are the basis of all others, so the category of Substance is the basis of all concepts of actual things; (4) that as Modality in the judgment is not a particular predicate, so by the modal concepts a determination is not superadded to things, etc. etc. Such observations are of great use. If we besides enumerate all the *predicables*, which we can find pretty completely in any good ontology (for example, Baunigarten's), and arrange them in classes under the categories, in which operation we must not neglect to add as complete a dissection of all these concepts as possible, there will then arise a merely analytical part of Metaphysic, which does not contain a single synthetical proposition, which might precede the second (the synthetical), and would by its precision and completeness be not only useful, but, in virtue of its system, be even to some extent elegant.

mere comparison of concepts already given, and are hence of quite another nature and use ; by my orderly division¹ they are saved from this confusion. But the value of my separate table of the categories will be still more obvious, when we presently separate the table of the transcendental concepts of Reason, which are of quite another nature and origin, and hence must have quite *another* form from the concepts of the understanding. This so necessary separation has never yet been made in any system of Metaphysic [where on the contrary] these rational Ideas live with the categories without separation, like the children of one family—a confusion not to be avoided in the absence of a definite system of categories.

¹ *Kritik*, p. 190 *sqq.*

THIRD PART OF THE MAIN TRANSCENDENTAL PROBLEM

How is Metaphysic in General Possible?

§ 40. PURE Mathematic and pure Science of Nature had no occasion for such a deduction, as we have made of both, *for their own safety* and certainty ; for the former rests upon its own evidence ; and the latter (though sprung from pure sources of the understanding) upon experience and its thorough confirmation, which latter testimony Physic cannot altogether refuse and dispense with ; because with all its certainty, it can never, as philosophy, rival Mathematic. Both sciences therefore stood in need of this inquiry, not for themselves, but for the sake of another science, Metaphysic.

Metaphysic has to do not only with concepts of nature, which always find their application in experience, but with pure rational Concepts, which never can be given in any possible experience, consequently with concepts whose objective reality (as different from mere chimeras), and with assertions, whose truth or falsity cannot be discovered or confirmed by any experience. This part of Metaphysic is precisely what constitutes its essential end, to which the rest is only a means, and thus this science requires a similar deduction *for its own sake*. The third question now pro-

posed relates therefore as it were to the root and essential difference of Metaphysic, that is, the occupation of Reason with itself, and the supposed knowledge of objects arising immediately from this incubation of its own concepts, without requiring, or indeed being able to reach that knowledge through, experience.¹

Without resolving this question reason never does itself justice. The empirical use to which reason limits the pure understanding, does not satisfy its proper destination. Every single experience is only a part of the whole sphere of its domain, but *the absolute totality of all possible experience* is itself not experience. Yet it is a necessary problem for Reason, the mere representation of which requires concepts quite different from the Categories, whose use is only *immanent*, or refers to experience, so far as it can be given. Whereas the concepts of Reason extend to the completeness, that is, the collective unity of all possible experience, and thereby exceed every given experience, and become *transcendent*.

As the understanding stands in need of categories for experience, Reason contains in itself the source of Ideas, by which I mean necessary notions, whose object *cannot* be given in any experience. The latter are inherent in the nature of Reason, as the former are in that of the understanding; and if the categories carry with them an illusion likely to mislead, in the Ideas it is inevitable, though it certainly can be kept from misleading us.

As all illusion consists in holding the subjective ground

¹ If we can say, that a science is *actual*, at least in the idea of all men, as soon as it appears that the problems which lead to it are proposed to everybody by the nature of human reason, and that hence many (though faulty) essays in it are always unavoidable, then we are bound to say, that Metaphysic is subjectively (and indeed necessarily) actual, and therefore we justly ask, how is it (objectively) possible.

of our judgments to be objective, a self-knowledge of pure reason in its transcendent (exaggerated) use is the sole preservative from the aberrations into which reason falls when it mistakes its destination, and refers that to the object transcendentally, which only regards its own subject and its guidance in all immanent use.

§ 41. The distinction of Ideas, that is, of pure concepts of Reason, from Categories, or pure concepts of the understanding, as cognitions of a quite distinct species, origin and use, is so important a point in founding a science which is to contain the system of all these *a priori* cognitions, that without this distinction metaphysic is absolutely impossible, or is at best a random, bungling attempt to build a castle in the air without a knowledge of the materials or of their fitness for any purpose. Had the *Kritik of Pure Reason* done nothing but first point out this distinction, it had thereby contributed more to clear up our notions and to guide our inquiry in the field of metaphysic, than all the vain efforts which have hitherto been made to satisfy the transcendent problems of pure reason, without ever surmising that we were in quite another field than that of the understanding, and hence classing concepts of the understanding and those of Reason together, as if they were of the same kind.

§ 42. All pure cognitions of the understanding have this feature, that their concepts present themselves in experience, and their principles can be confirmed by it; whereas the transcendent cognitions of Reason cannot, either as *Ideas*, appear in experience, or as *propositions* ever be confirmed or refuted by it. Hence whatever errors may slip in unawares, can only be discovered by pure Reason itself—a discovery of much difficulty, because this very Reason naturally becomes dialectical by means of its Ideas, and

this unavoidable illusion cannot be limited by any objective and dogmatical researches into things, but by a subjective investigation of reason itself as a source of Ideas.

§ 43. In the *Kritik of Pure Reason* it was always my greatest care to endeavour not only carefully to distinguish the [various] species of cognition, but to derive notions belonging to each one of them from their common source. I did this in order that by knowing whence they originated, I might determine their use with safety, and also have the very novel but incalculable advantage of knowing the completeness of my enumeration, classing, and specification of concepts *a priori*, and therefore according to principles. Without this [security] metaphysic is mere rhapsody, in which no one knows whether he has enough, or whether and where something is still wanting. We can indeed have this advantage only in pure philosophy, but of this philosophy it constitutes the very essence.

As I had found the origin of the categories in the four logical functions of all the judgments of the understanding, it was quite natural to seek the origin of the Ideas in the three functions of the syllogisms of Reason ; for as soon as these pure concepts of Reason (the transcendental Ideas) are given, they could hardly, except they be held innate, be found anywhere else, than in the same act of Reason. This, so far as it regards mere form, constitutes the logical element of the syllogisms of Reason ; but, so far as it represents the judgments of the understanding as determined relatively to the one or to the other form *a priori*, constitutes transcendental concepts of pure Reason.

The formal distinction of syllogisms renders their division into categorical, hypothetical, and disjunctive necessary. The concepts of Reason founded on them contained therefore, first, the Idea of the complete subject

(the substantial); secondly, the Idea of the complete series of conditions; thirdly, the determination of all concepts in the Idea of a complete complex of [all] possible [being].¹ The first Idea is psychological, the second cosmological, the third theological, and, as all three give occasion to Dialectic, yet each in its own way, the division of the whole Dialectic of pure reason into its Paralogism, its Antinomy, and its Ideal, was arranged accordingly. Through this deduction we may feel assured that all the claims of pure reason are completely represented, and that none can be wanting; because the faculty of Reason itself, whence they all take their origin, is thereby completely surveyed.

§ 44. In these general considerations it is also remarkable that the Idea of Reason is not, like the categories, of any service to the use of our understanding in experience, but with respect to that use is quite dispensable, and even an impediment to the maxims of the rational cognition of nature, though necessary in another aspect still to be determined. Whether the soul is or is not a simple substance, is of no consequence to us in the explanation of its phenomena. For we cannot render the notion of a simple being intelligible by any possible experience sensuously or *in concreto*. The notion is therefore quite void as regards all hoped-for insight into the cause of phenomena,

¹ In disjunctive judgments we consider all *possibility* as divided in relation to a particular concept. The ontological principle of the thorough determination of a thing in general (viz., one of all possible opposite predicates belongs to everything), which is at the same time the principle of all disjunctive judgments, presupposes the complex of all possibility, in which the possibility of everything in general is considered as determined [reading *bestimmt*]. This may serve as a slight explanation of the above proposition: that the act of Reason in disjunctive syllogisms is formally the same as that by which it accomplishes the Idea of a complex of all reality, which contains in itself the positive [member] of all [pairs of] contradictory predicates.

and cannot at all serve as a principle of the explanation of that which internal or external experience supplies. So the cosmological Ideas of the beginning of the world or of its eternity (*a parte ante*) cannot be of any greater service to us for the explanation of any event in the world itself. And finally we must, according to a right maxim of the philosophy of nature, refrain from all explanations of the design of nature, drawn from the will of a Supreme Being ; because this [mode of explanation] is not natural philosophy, but an acknowledgment that we have come to the end of it. The use of these Ideas, therefore, is quite distinct from that of those categories by which (and by the principles built upon which) experience itself first becomes possible. But our laborious Analytic of the understanding would be superfluous if we had nothing else in view than the mere cognition of nature as it can be given in experience ; for reason does its work, both in mathematic and in the science of nature, quite safely and well without any of this subtile deduction ; our Kritik of the Understanding therefore combines with the Ideas of pure Reason for a purpose placed beyond the empirical use of the understanding, which we have already declared to be in this aspect totally impossible, and without any object or meaning. But yet there must be harmony between that which belongs to the nature of Reason and to that of the understanding, and the former must contribute to the perfection of the latter, and cannot possibly confuse it.

The solution of this question is as follows : Pure reason does not in its Ideas point to particular objects, which lie beyond the field of experience, but only requires completeness of the use of the understanding in the system of experience. But this completeness can be a completeness of principles only, not of intuitions and of objects. In order however to represent the Ideas to itself determinately,

Reason conceives them as the cognition of an object which [cognition] is as regards these rules completely determined (though the object is only an Idea), for the purpose of bringing the cognition of the understanding as near as possible to the completeness which that Idea denotes.

Prefatory Remark to the Dialectic of Pure Reason.

§ 45. We have above shown (in §§ 33 and 34) that the purity of the categories from all admixture of sensuous determinations may mislead reason into extending their use, quite beyond all experience, to things *per se*; though as these categories themselves find no intuition which can give them meaning or sense *in concreto*, they (as mere logical functions) can represent a thing in general, but cannot give by themselves alone a determinate concept of anything. Such hyperbolical objects are distinguished by the appellation of *Noûmena*, or pure beings of the understanding (or better, beings of thought), such as, for example, *substance*, but conceived without *permanence* in time, or *cause*, but not *acting in time*, etc. Here predicates, that only serve to make the conformity-to-law of experience possible, are applied to these concepts, and yet they are deprived of all the conditions of intuition, on which alone experience is possible, and so the concepts lose all significance.

There is no danger of the understanding spontaneously making an excursion so very wantonly beyond its own bounds into the field of the mere creatures of thought, without being impelled by foreign laws. But when Reason, which cannot be fully satisfied with any empirical use of the rules of the understanding, as being always conditioned, requires a completion of this chain of conditions, then the understanding is forced out of its sphere. And then it

partly represents objects of experience in a series so extended that no experience can grasp it, partly even (with a view to complete the series) it seeks entirely beyond it *noumena*, to which it can attach that chain, and so, having at last escaped from the conditions of experience, make its attitude as it were final. These are then the transcendental Ideas, which, though according to the true but hidden ends of the natural determination of our reason they may aim not at extravagant concepts, but at unbounded extension of empirical use, yet seduce [*ablocken*] the understanding by an unavoidable illusion to a *transcendent* use, which, though deceitful, cannot be restrained within the bounds of experience by any resolution, but only by scientific instruction and with much difficulty.

I. *The Psychological Idea.*¹

§ 46. It has been long since observed, that in all substances the proper subject, that which remains after all the accidents (as predicates) are abstracted, consequently that which is itself *substantial*, is unknown, and various complaints have been made concerning these limits to our knowledge. But we must take care to observe, that the human understanding is not to be blamed for its inability to know the substance of things, that is, to determine it by itself, but rather for requiring to cognise a mere Idea determinately, like a given object. Pure reason requires us to seek for every predicate of a thing its proper subject, and for this subject, which is itself necessarily nothing but a predicate, *its* subject, and so on indefinitely (or as far as we can reach). But hence it follows, that we must not hold anything, at which we can arrive, to be an ultimate subject,

¹ *Vide Kritik*, p. 237 *sqq.*, and Appendix C to this volume. M.

and that substance itself never can be thought by our understanding, however deep we may penetrate, even if all nature were unveiled to us. For the specific nature of our understanding consists in thinking everything discursively, that is, representing it by concepts, and so by mere predicates, to which therefore the absolute subject must always be wanting. Hence all the real properties, by which we cognise bodies, are mere accidents, not excepting impenetrability, which we can only represent to ourselves as the effect of a power of which the subject is unknown to us.

Now we appear to have this substance in the consciousness of ourselves (in the thinking subject), and indeed in an immediate intuition; for all the predicates of an internal sense refer to the *ego*, as subject, and I cannot conceive myself as the predicate of any other subject. Hence completeness in the reference of the given concepts as predicates to a subject—not merely an Idea, but an object—that is, the *absolute subject* itself, seems to be given in experience. But this expectation is disappointed. For the *Ego* is not a concept,¹ but only the indication of the object of the internal sense, so far as we cognise it by no further predicate. Consequently it cannot be in itself a predicate of any other thing; but just as little can it be a determinate concept of an absolute subject, but is, as in all other cases, only the reference of the internal phenomena to their unknown subject. Yet this Idea (which serves very well, as a regulative principle, totally to destroy all materialistic explanations of the internal phenomena of the soul) occasions

¹ Were the representation of the apperception (the *Ego*) a concept, by which anything could be thought, it could be used as a predicate of other things or contain predicates in itself. But it is nothing more than the feeling of an existence without the least definite notion [Begriff] and is only the representation of that, to which all thinking stands in relation (*relatione accidentis*).

by a quite natural misunderstanding a very specious argument, which, from this supposed cognition of the substance of our thinking being, infers its nature, so far as the knowledge of it falls quite without the complex of experience.

§ 47. But though this thinking self (the soul) should be termed substance, as being the ultimate subject of thinking which cannot be further represented as the predicate of another thing; yet this concept remains quite empty and without results, if permanence—the quality which renders the concept of substances in experience fruitful—cannot be deduced from it.

But permanence can never be proved from the concept of a substance, as a thing *per se*, but for the purposes of experience only. This is sufficiently shown by the first Analogy of Experience,¹ and whoever will not yield to this proof may try for himself whether he can succeed in proving, from the concept of a subject which does not exist itself as the predicate of another thing, that its existence is thoroughly permanent, and that it cannot either in itself or by any natural cause originate or be annihilated. These synthetical *a priori* propositions can never be proved in themselves, but only in reference to things as objects of possible experience.

§ 48. If therefore from the concept of the soul as a substance, we would infer its permanence, this can hold good as regards possible experience only, not [of the soul] as a thing in itself and beyond all possible experience. But life is the subjective condition of all our possible experience, consequently we can only infer the permanence of the soul in life; for the death of man is the end of all experience which concerns the soul as an object of experience, except the contrary be proved, which is the very question in hand. The permanence of the soul can therefore only be proved

¹ Cf. *Kritik*, p. 136 *sqq.*

where everybody grants it, during the life of man. But we cannot [establish it], as we desire to do, after death ; and for this general reason, that the concept of substance, so far as it is to be considered necessarily combined with the concept of permanence, can be so combined only according to principles of possible experience, and therefore for the purposes of experience only.¹

§ 49. That something actual without us not only corresponds, but must correspond, to our external perceptions, can likewise be proved not as a connexion of things in themselves, but for the purpose of experience. This means:—that it certainly admits of proof that there is something empirical, *i.e.* [existing] as phenomenon in space without us ; for we have nothing to do with other objects than those which belong to possible experience ; because

¹ It is indeed very remarkable, how carelessly metaphysicians have always passed over the principle of the permanence of substances without ever attempting a proof of it ; doubtless because they found themselves abandoned by all proofs as soon as they began to deal with the concept of substance. Common sense, which felt distinctly that without this presupposition no union of perceptions in experience is possible, supplied the want by a postulate ; for from experience itself it never could derive such a principle, partly because substances cannot be so traced in all their alterations and dissolutions, that the matter can always be found undiminished, partly because the principle contains *necessity*, which is always the sign of an *a priori* principle. People then boldly applied this postulate to the concept of soul as a *substance*, and concluded a necessary continuance of the soul after the death of man (especially as the simplicity of this substance, which is inferred from the indivisibility of consciousness, secured it from destruction by dissolution). Had they found the genuine source of this principle—a discovery which requires deeper researches than they were ever inclined to make—they would have seen, that the law of the permanence of substances has place for the purposes of experience only, and hence can hold good of things, so far as they are to be cognised and conjoined with others in experience, but never independently of all possible experience, and consequently cannot hold good of the soul after death.

objects, which cannot be given us in any experience, are nothing to us. That which is intuited in space, is empirically without [outside] me, and space, together with all the phenomena which it contains, belongs to the representations, whose connexion according to laws of experience proves their objective truth, just as the connexion of the phenomena of the internal sense proves the actuality of my soul (as an object of the internal sense). I am therefore conscious by means of external experience of the actuality of bodies, as external phenomena in space, in the same manner as I am, by means of the internal experience, of the existence of my soul in time.¹ For this (soul) I only cognise as an object of the internal sense by phenomena which constitute an internal state, and of which the being *per se*, that forms the basis of these phenomena, is unknown to me. Cartesian idealism therefore does nothing but distinguish external experience from dreaming; and the conformity to law (as a criterion of its truth) of the former, from the irregularity and the false illusion of the latter. In both it presupposes space and time as conditions of the existence of objects, and it only inquires whether the objects of the external senses, which we when awake put in space, are as actually to be found in it, as the object of the internal sense, the soul, is in time; that is, whether experience carries with it sure criteria to distinguish it from imagination. Now this doubt may easily be removed, and we always do remove it in common life by investigating the connexion of phenomena in both [space and time] according to universal laws of experience, and we cannot doubt, when the representation

¹ It is to be observed that Kant here places his refutation of Cartesian idealism in the place which it held in the First Edition of the *Kritik*. In the Second Edition it was transferred to an earlier, and I think a better, place, in connexion with the Postulates of Empirical Thought. M.

of external things thoroughly agrees therewith, that they constitute truthful experience. Material idealism, in which phenomena are considered as such only according to their connexion in experience, may accordingly be very easily refuted; and it is just as sure an experience, that bodies exist without us (in space), as that I myself exist according to the representation of the internal sense (in time): for the notion *without* [outside] us, only signifies existence in space. However as the *Ego* in the proposition, *I am*, means not only the object of internal intuition (in time), but the subject of consciousness, just as body means not only external intuition (in space), but the thing *in itself*, which is the basis of this phenomenon; [as this is the case] the question, whether bodies (as phenomena of the external sense) exist as bodies *apart from my thoughts*, may without any hesitation be denied in nature. But the question, whether I myself *as a phenomenon of the internal sense* (the soul according to empirical psychology) exist apart from my faculty of representation in time, is an exactly similar inquiry, and must likewise be answered in the negative. And in this manner everything, when it is reduced to its true meaning, is decided and certain. The formal (which I have also called transcendental) actually abolishes the material, or Cartesian, Idealism. For if space be nothing but a form of my sensibility, it is as a representation in me just as actual as I myself am, and nothing but the empirical truth of the representations in it remains for consideration. But, if this is not the case, if space and the phenomena in it are something existing out of us, then all the criteria of experience beyond our perception can never prove the actuality of these objects without us.¹

¹ The foregoing paragraph is an excellent commentary on the Refutation of (Cartesian, not Berkleian) idealism in the Second Edition of the

II. *The Cosmological Idea.*¹

§ 50. This product of pure Reason in its transcendent use is its most remarkable phenomenon, and the most powerful of all means of rousing philosophy from its dogmatic slumber, and of exciting it to undertake the arduous task of the *Kritik of the Reason* itself.

I term this Idea cosmological, because it only takes its objects from the sensible world, and does not use any other than those whose object is given to sense, consequently is so far at home [immanent], not transcendent, and therefore so far not an Idea ; whereas, to conceive the soul as a simple substance, already means to conceive such an object (the Simple) as cannot be presented to the senses. Yet the cosmological Idea extends the connexion of the conditioned with its condition (whether the connexion is mathematical or dynamical) so far, that experience never can keep up with it. It is therefore with regard to this point always an Idea, whose object never can be adequately given in any experience.

§ 51. In the first place, the use of a system of categories becomes here so obvious and unmistakable, that even if there were not several other proofs of it, this alone would sufficiently prove it indispensable in the system of pure reason. There are only four such transcendent Ideas, as there are so many classes of categories ; in each of which, however, they refer only to the absolute completeness of the series of the conditions for a given conditioned. And conformably to these cosmological Ideas there are only

itlik, and corroborates my assertion that it has been absurdly misconceived. It is not creditable to German Kantians that they have propagated this blunder. M.

¹ Cf. *Kritik*, p. 256.

four kinds of dialectical assertions of pure Reason, which, as they are dialectical, thereby prove, that to each of them, on equally specious principles of pure reason, a contradictory assertion stands opposed. As all the metaphysical art of the most subtile distinction cannot prevent this opposition, it compels the philosopher to recur to the first sources of pure reason itself. This Antinomy, not arbitrarily invented, but founded in the nature of human reason, and hence unavoidable and never ceasing, contains the following four theses together with their antitheses :

1.

Thesis.

The World has, as to Time and Space, a Beginning (Bounds).

Antithesis.

The World is, as to Time and Space, infinite.

2.

Thesis.

Every thing in the World consists of *simple* [parts].

Antithesis.

There is nothing simple, but every thing is *composite*.

3.

Thesis.

There are in the World Causes [acting] through *Freedom* [Liberty].

Antithesis.

There is no Liberty, but all is *Nature*.

4.

Thesis.

In the Series of the World-Causes there is some *necessary Being*.

Antithesis.

There is Nothing necessary in the World, but in this Series
All is contingent.

§ 52. *a.* Here we have the most singular phenomenon of human reason, no other instance of which can be shown in any other use [of reason]. If we, as is commonly done, represent to ourselves the phenomena of the sensible world as things in themselves,—if we assume the principles of their combination as principles universally valid of things in themselves and not merely of experience (as is usually, nay without our Kritik, unavoidably done),—there arises an unexpected conflict, which never can be removed in the common dogmatical way; because the thesis, as well as the antithesis, can be shown by equally clear, evident, and irresistible proofs—for I pledge myself as to the correctness of all these proofs—and reason therefore perceives that it is divided with itself, a state at which the sceptic rejoices, but which must cause the critical philosopher reflection and uneasiness.

§ 52. *b.* We may make divers blunders in Metaphysic without any fear of being detected in falsehood. For we never can be refuted by experience if we but avoid self-contradiction, which in synthetical, though purely invented propositions, may be done whenever the concepts, which we connect, are mere Ideas, that cannot be given (as to their whole content) in experience. For how can we make out by experience, whether the world is from eternity or

had a beginning, whether matter is infinitely divisible or consists of simple parts? Such concepts cannot be given in any experience, however great, and consequently the falsehood either of the positive or the negative proposition cannot be discovered by this test.

The only possible case, in which Reason reveals unintentionally its secret Dialectic, which it falsely announces as Dogmatic, is when it grounds an assertion upon a universally admitted principle, and from another equally admitted infers, with the greatest accuracy of inference, the exact contrary. This is actually here the case with regard to four natural Ideas of Reason, whence four assertions on the one side, and as many counter-assertions on the other arise, each strictly following from universally-acknowledged principles. Thus the dialectical illusion of pure Reason appears in the use of these principles, [an illusion] which must otherwise be for ever concealed.

This is therefore a decisive experiment, which must necessarily expose any error lying hidden in the assumptions of Reason.¹ Contradictory propositions cannot both be false, unless the concept, which is the subject of both, is self-contradictory; for example, the propositions, 'a square circle is round, and a square circle is not round,' are both false. For, as to the former it is false, that the circle is round, because it is quadrangular; and it is

¹ I therefore request the critical reader to make this Antinomy his chief study, because nature itself seems to have established it with a view to stagger reason in its daring pretensions, and to force it to self-examination. For every proof, which I have given, as well of the thesis as of the antithesis, I undertake to be responsible, and thereby to show the certainty of the inevitable Antinomy of reason. As soon as the reader is brought by this curious phenomenon to recur to the proof of the presumption upon which it rests, he will feel himself constrained to investigate the first foundation of all the cognition of pure reason with me more thoroughly.

likewise false, that it is not round, that is, angular, because it is a circle. For the logical mark of the impossibility of a concept consists in this, that if we presuppose it, two contradictory propositions both become false ; consequently, as no middle between them is conceivable, *nothing at all* is thought by that concept.

§ 52. *a.* The first two Antinomies, which I call mathematical, because they are concerned with the addition or division of the homogeneous, are founded on such a self-contradictory concept ; and hence I explain how it happens, that the Thesis in both, as well as the Antithesis [addition and subdivision] is false.

When I speak of objects in time and in space, it is not of things in themselves, of which I know nothing, but of things as phenomena, that is, of experience, as the particular way of cognising objects which is vouchsafed to man. Accordingly I must not say of what I think in time or in space, that in itself, and beyond [outside] these my thoughts, it exists in space and in time ; for in that case I should contradict myself ; because space and time, together with the phenomena in them, are nothing existing in themselves and without [outside] my representations, but are themselves only modes of representation, and it is palpably contradictory to say, that a mere mode of representation exists without our representation. Objects of the senses therefore exist only in experience ; whereas to give them a self-subsisting existence apart from experience or before it, is merely to represent to ourselves, that experience actually exists apart from experience or before it.

Now if I inquire after the quantity of the world, as to space and time, it is equally impossible, as regards all my notions, to declare it infinite, or to declare it finite. For neither assertion can be contained in experience, because

experience either of an *infinite* space, or of an infinite time elapsed, or again, of the *bounding* of the world by a void space or an antecedent void time, is impossible; these are only Ideas. This quantity of the world, which is determined in either way, should therefore exist in the world *per se* apart from all experience. But this contradicts the notion of a world of sense, which is merely a complex of the phenomena whose existence and connexion occur only in our representations, that is, in experience, since this latter is not a thing *per se*, but is itself a mere mode of representation. Hence it follows, that as the concept of an absolutely existing world of sense is self-contradictory, the solution of the problem concerning its quantity, whether attempted affirmatively or negatively, is always false.

The same holds good of the second Antinomy, which relates to the division of phenomena. For these are mere representations, and the parts exist merely in their representation, consequently in the division, or in a possible experience where they are given, and the division reaches only as far as this latter reaches. To assume that a phenomenon, e.g. that of body, contains in itself before all experience all the parts, which any possible experience can ever reach, is to give a mere phenomenon, which can exist only in experience, withal an existence previous to experience, or to say, that mere representations exist before they occur in our faculty of representation; which assertion is self-contradictory, as also is every solution of our misunderstood problem, whether we maintain, that bodies in themselves consist of an infinite number of parts, or of a finite number of simple parts.

§ 53. In the first (the mathematical) class of Antinomies the falsehood of the assumption consists in representing that what is self-contradictory (a phenomenon as a thing *per se*) can be united in one concept. But, as to the

second (the dynamical) class of Antinomies, the falsehood of the representation consists in representing as contradictory what can be united; so that, as in the former case, the opposed assertions are both false, in this case, on the other hand, where they are opposed to one another by mere misunderstanding, they may both be true.

For mathematical connexion necessarily presupposes homogeneity of what is connected (in the concept of quantity), but this is by no means requisite in the dynamical. When the quantum of what is extended is in question, all the parts must be homogeneous with one another and with the whole; whereas, in the connexion of cause and effect, homogeneity may indeed likewise be found, but is not necessary; for the concept of causality (by means of which something is posited through something else quite distinct from it), at all events, does not require it.

If the objects of the sensuous world are taken for things in themselves, and the above laws of nature for the laws of things in themselves, the contradiction would be unavoidable. So also, if the subject of freedom is, like other objects, represented as mere phenomenon, the contradiction is just as unavoidable, for the same predicate is at once affirmed and denied of the same kind of object in the same sense. But if natural necessity is referred merely to phenomena, and freedom merely to things in themselves, no contradiction arises, if we at once assume, or admit both kinds of causality, however difficult or impossible it may be to make the latter kind conceivable.

In the phenomenon every effect is an event, or something that happens in time; it must, according to the universal law of nature, be preceded by a determination of the causality (or state) of its cause, which follows according to a constant law. But this determination of the cause to

[produce] causality must likewise be something that happens, or *takes place*; the cause must have *begun to act*, otherwise no succession between it and the effect could be conceived. Otherwise the effect, as well as the causality of the cause, would have always existed. Therefore *the determination* of the cause to act must also have originated among phenomena, and must consequently, as well as its effect, be an event, which must again have its cause, and so on; hence natural necessity must be the condition, on which effective causes are determined. Whereas if freedom is to be a property of certain causes of phenomena, it must, as regards these, which are events, be a faculty of beginning them *from itself (sponte)*, that is, without the causality of the cause itself beginning, and hence without requiring any other ground to determine its beginning. But then the *cause*, as to its causality, must not rank under time-determinations of its state, that is, *not be a phenomenon*, and must be considered a thing *per se*, and its *effects* only as phenomena.¹ If we can think such an influence of the

¹ The Idea of freedom occurs only in the relation of the *intellectual*, as cause, to the *phenomenon*, as effect. Hence we cannot attribute freedom to matter in regard to the incessant action by which it fills its space, though this action takes place from an internal principle. We can likewise find no notion of freedom suitable to pure rational beings, for instance, to God, so far as His action is immanent. For His action, though independent of external determining causes, is determined in His eternal reason, that is, in the divine *nature*. It is only, if *something is to begin* by an action, and so the effect occurs in the sequence of time, or in the world of sense (e.g. the beginning of the world), that we can put the question, whether the causality of the cause must likewise itself begin, or whether the cause can originate an effect without its causality itself beginning. In the former case the concept of this causality is a concept of natural necessity, in the latter, that of freedom. From this the reader will see, that, as I explained freedom to be the faculty of beginning an event spontaneously, I have exactly hit the notion which is the problem of Metaphysic.

things of understanding [*Verstandeswesen*] on phenomena without contradiction, then natural necessity will attach to all connexion of cause and effect in the sensuous world, but, on the other hand, freedom can be granted to such cause, as is itself not a phenomenon (though the basis of one). Nature therefore and freedom can without contradiction be attributed to the very same thing, but in different relations—on one side as a phenomenon, on the other as a thing *per se*.

We have in us a faculty, which not only stands in connexion with its subjective determining grounds, that are the natural causes of its actions, and is so far the faculty of a being that itself belongs to phenomena: but is [also a faculty] referred to objective grounds, that are only ideas, so far as they can determine this faculty, a connexion which is expressed by the word *ought*. This faculty is called *Reason*, and, so far as we consider a being (man) entirely according to this objectively determinable reason, he cannot be considered as a being of sense, but this property is that of a thing *per se*, of which we cannot comprehend the possibility—I mean how the *ought* (which however has never yet taken place) should determine its activity, and can become the cause of actions, whose effect is a phenomenon in the sensible world. Yet the causality of Reason would be freedom with regard to the effects in the sensuous world, so far as we can consider *objective grounds*, which are themselves Ideas, as determining in regard to it. For its action in that case would not depend upon subjective conditions, consequently not upon those of time, and of course not upon the law of nature, which serves to determine them, because grounds of reason give to actions the rule universally, according to principles, without the influence of the circumstances of either time or place.

What I adduce here is merely meant as an example to make the thing intelligible, and does not necessarily belong to our problem, which must be decided from mere concepts, independently of the properties which we meet in the actual world.

Now I may say without contradiction : that all the actions of rational beings, so far as they are phenomena (occurring in any experience), are subject to the necessity of nature ; but the same actions, as regards merely the rational subject and its faculty of acting according to mere Reason, are free. For what is required for the necessity of nature ? Nothing farther than the determinability of every event in the world of sense according to constant laws, that is, a reference to cause in the phenomenon ; in this process the thing in itself at its basis and its causality remain unknown. But I say, that *the law of nature remains*, whether the rational being is the cause of the effects in the sensuous world from reason, that is, through freedom, or whether it does not determine them on grounds of reason. For, if the former is the case, the action is performed according to Maxims, the effect of which as phenomenon is always conformable to constant laws ; if the latter is the case, and the action not performed on principles of Reason, it is subjected to the empirical laws of the sensibility, and in both cases the effects are connected according to constant laws ; more than this we do not require or know concerning natural necessity. But in the former case reason is the cause of these laws of nature, and therefore free ; in the latter the effects follow according to mere natural laws of sensibility, because reason does not influence it ; but reason itself is not determined on that account by the sensibility, and is therefore free in this case too. Freedom is therefore no hindrance to natural law in phenomena, neither does this law interfere with the freedom

of the practical use of Reason, which is connected with things in themselves, as determining grounds.

And thus we rescue practical freedom, or that in which Reason has causality according to objectively determining grounds, and do not curtail natural necessity in the least with regard to the very same effects, as phenomena. The same remarks may be serviceable for the illustration of what we had to say concerning transcendental freedom and its union with natural necessity (in the same subject, but not taken in the same reference). For, as to this, every beginning of the action of a being from objective causes regarded as determining grounds, is always a *first beginning*, though the same action is in the series of phenomena only a *subaltern beginning*, which must be preceded by a state of the cause, which determines it, and is itself determined in the same manner by another immediately preceding. Thus we are able, in rational beings, or in beings generally, so far as their causality is determined in them as things *per se*, to imagine a faculty of beginning from itself a series of states, without falling into contradiction with the laws of nature. For the relation of the action to objective grounds of reason is not a time-relation; in this case that which determines the causality does not precede in time the action, because such determining grounds represent not a reference to objects of sense, *e.g.* to causes in the phenomenon, but [they represent] determining causes, as things *per se*, which do not rank under conditions of time. And in this way the action, with regard to the causality of reason, can be considered as a first beginning in respect to the series of phenomena, and yet also as a merely subordinate beginning. We may therefore consider it (without contradiction) in the former aspect as free, but in the latter (as it is merely phenomenon) as subject to natural necessity.

As to the *fourth* Antinomy, it is solved in the same way as the conflict of reason with itself in the third. For, provided the *cause in the phenomenon* is distinguished from the *cause of the phenomena* (so far as it can be thought as a *thing per se*), both propositions are perfectly reconcilable : the one, that there is nowhere in the sensuous world a cause (according to similar laws of causality), whose existence is absolutely necessary ; the other, that this world is nevertheless connected with a Necessary Being as its cause (but of another kind and according to another law). The incompatibility of these propositions entirely rests upon the mistake of extending what is valid merely of phenomena to things in themselves, and in general confusing both in one concept.

§ 54. This is the arrangement and this the solution of the whole Antinomy, in which reason finds itself involved in the application of its principles to the sensible world, the former of which alone (the mere arrangement) would be of considerable use in promoting the knowledge of human reason, even though the solution failed to fully satisfy the reader, who has here to combat a natural illusion, which has been but recently exposed to him, and which he had hitherto always regarded as true. For one result at least is unavoidable. As it is quite impossible to prevent this conflict of reason with itself—so long as the objects of the sensible world are taken for things in themselves, and not for mere phenomena, which they are in fact—the reader is thereby compelled to examine over again the deduction of all our *a priori* cognition and the proof which I have given of my deduction in order to come to a decision on the question. This is all I require at present ; for when in this occupation he shall have thought himself far enough into the nature of pure reason, the only notions by which the solution of

the conflict of reason is possible, will become sufficiently familiar to him. Without this preparation I cannot expect a hasty assent even from the most attentive reader.

III. *The Theological Idea.*¹

§ 55. The third transcendental Idea, which affords matter for the most important, but, if pursued only speculatively, transcendent and thereby dialectical use of Reason, is the Ideal of pure Reason. Reason in this case does not, as with the psychological and the cosmological Ideas, begin from experience, and err by exaggerating its grounds, in striving to attain, if possible, the absolute completeness of their series. It rather breaks totally with experience, and from mere concepts of what constitutes the absolute completeness of a thing in general, consequently by means of the Idea of a most perfect primal Being, it proceeds to determine the possibility and therefore the actuality of all other things. And so the mere presupposition of a Being, who is conceived not in the series of experience, yet for the purposes of experience—for the sake of comprehending its connexion, order, and unity—that is, the *Idea*, is more easily distinguished from the concept of the understanding here, than in the former cases. Hence we can easily expose the dialectical illusion which arises from our making the subjective conditions of our thinking objective conditions of things themselves, and [so holding] a necessary hypothesis for the satisfaction of our reason to be a dogma. As the observations of the *Kritik* on the pretensions of transcendental theology are intelligible, clear, and decisive, I have nothing more to add on the subject.

¹ Cf. *Kritik*, p. 350 *sqq.*

General Remark on the Transcendental Ideas.

§ 56. The objects, which are given us by experience, are in many respects incomprehensible, and many questions, to which the law of nature leads us, when carried beyond a certain point (though quite conformably to the laws of nature), admit of no answer; as for example the question: why substances attract one another? But if we entirely quit nature, or in pursuing its combinations, exceed all possible experience, and so involve ourselves in mere Ideas, we cannot then say that the object is incomprehensible, and that the nature of things proposes to us insoluble problems. For we are not then concerned with nature or in general with given objects, but with concepts, which have their origin merely in our reason, and with mere creatures of thought. As regards these all the problems that arise from our notions of them must be solved, because of course reason can and must give a full account of its own procedure.¹ As the psychological, cosmological, and theological Ideas are nothing but pure concepts of Reason, which cannot be given in any experience, the questions which reason asks us about them are put to us not by the objects, but by mere maxims of our reason for the sake of its own satisfaction.

¹ And therefore Platner in his Aphorisms acutely says (§§ 728, 729), 'If reason be a criterion, no concept, which is incomprehensible to human reason, can be possible. Incomprehensibility has place in what is actual only. Here incomprehensibility arises from the insufficiency of the acquired Ideas.' It therefore only sounds paradoxical, but is otherwise not strange to say, that in nature there is much incomprehensible (e.g. the faculty of generation) but if we mount still higher, and even go beyond nature, everything again becomes comprehensible; for we then quit entirely the objects, which can be given us, and occupy ourselves merely about Ideas, in which occupation we can easily comprehend the law that reason prescribes by them to the understanding for its use in experience, because the law is the reason's own production.

They must collectively be capable of complete answers, which is done by showing that they are principles which bring our use of the understanding into thorough agreement, completeness, and synthetical unity, and that they so far hold good of experience only, but of experience as a *whole*. But though an absolute whole of experience is impossible, yet the Idea of a whole of cognition according to principles must above all things afford our knowledge a particular sort of unity, that of a system, without which it is nothing but patchwork, and cannot be used for the highest end (which can only be the system[-atising] of all ends)—I do not here mean only the practical, but also the highest end of the speculative use of reason.

The transcendental Ideas therefore express the peculiar destination of reason as a principle of systematic unity in the use of the understanding. Yet [we are apt to consider] this unity of the mode of cognition as attached to the object of cognition, if we regard that which is merely *regulative* to be *constitutive*, and if we persuade ourselves, that we can by means of these Ideas enlarge our cognition transcendently, or far beyond all possible experience. But [if we do] so—as this unity only serves to render experience within itself as nearly complete as possible, that is, to limit its progress by nothing that cannot belong to experience—it is a mere misunderstanding in our estimate of the proper destination of our reason and of its principles, a Dialectic, which both confuses the empirical use of reason, and also sets reason at variance with itself.

CONCLUSION.

On the determination of the Bounds of Pure Reason.

§ 57. After all the very cogent proofs already adduced, it

were absurd for us to hope to know more of any object, than belongs to the possible experience of it, or to lay claim to the least atom of knowledge about anything not assumed to be an object of possible experience, which would determine it according to the constitution it has in itself. For how could we compass this determination, as time, space, and the Categories, and still more all the concepts formed by empirical intuition or *perception* in the sensible world, have and can have no other use, than to make experience possible. And if this condition is not imposed on the pure concepts of the understanding, they do not determine any object, and have no meaning whatever.

But it would be on the other hand a still greater absurdity if we conceded no things *per se*, or set up our experience for the only possible mode of knowing things, our intuition in space and in time for the only possible intuition, and our discursive understanding for the archetype of every possible understanding ; in fact if we wished to have the principles of the possibility of experience considered universal conditions of things in themselves.

Our principles, which limit the use of reason merely to possible experience, might in this way become *transcendent*, and the limits of our reason be set up as limits of the possibility of things themselves (as Hume's dialogues may illustrate), if a careful Kritik did not guard the bounds of our reason with respect to its empirical use, and set a limit to its pretensions. Scepticism originally arose from metaphysic and its licentious dialectic. At first it might, merely to favour the empirical use of reason, announce everything that transcends this use as worthless and deceitful ; but by and by, when it was perceived that the very same principles that are used in experience, insensibly, and apparently with the same right, led still further than experi-

ence extends, then men began to doubt even the propositions of experience. But here there is no danger ; for sound sense will doubtless always assert its rights. A certain confusion, however, arose in science which cannot determine how far reason is to be trusted, and why only so far and no further, and this confusion can only be cleared up and all future relapses obviated by a formal determination, on principle, of the boundary of the use of our reason.

We cannot indeed, beyond all possible experience, form a determinate notion of what things in themselves may be. Yet we are not at liberty to abstain entirely from inquiring into them ; for experience never satisfies reason fully, but in answering questions, refers us further and further back, and leaves us dissatisfied with regard to their complete solution. This any one may gather from the Dialectic of pure reason, which therefore has its good subjective grounds. If we can advance, as regards the nature of our soul, as far as a clear consciousness of the subject, and the conviction, that its phenomena cannot be *materialistically* explained, who can refrain from asking what the soul really [*eigentlich*] is, and, if no concept of experience suffices for the purpose, from accounting for it by a concept of Reason (that of a simple immaterial being), though we cannot by any means prove its objective reality ? Who can satisfy himself with mere empirical knowledge in all the cosmological questions of the duration and of the quantity of the world, of freedom or of natural necessity, as every answer given on principles of experience begets a fresh question, which likewise requires its answer, and thereby clearly shows the insufficiency of all physical modes of explanation to satisfy reason ? Finally, who is there that does not see, in the thorough contingency and dependence of all his thoughts and assumptions on mere principles of experience, the impossibility of stopping there ?

And who does not feel himself compelled, notwithstanding all interdictions against losing himself in transcendent Ideas, to seek tranquillity and contentment beyond all the concepts which he can vindicate by experience, in the concept of a single Being? The possibility indeed of this Idea in itself, we cannot conceive, but at the same time we cannot refute it, because it relates to a mere being of the understanding, and without it reason must needs remain for ever dissatisfied.

Bounds (in extended beings) always presuppose a space existing outside a certain determinate place, and inclosing it; limits do not require this, but are mere negations, which affect a quantity, so far as it is not absolutely complete. But our reason, as it were, sees a space around it for the cognition of things in themselves, though it (reason) never can have determinate notions of them, and is limited to phenomena only.

As long as the cognition of reason is homogeneous, determinate bounds to it are inconceivable. In mathematic and in natural philosophy human reason admits of limits, but not of bounds, viz. that something indeed lies without it, at which it can never arrive, but not that it will at any point find completion in its internal progress. The enlarging of our views in mathematic, and the possibility of new discoveries, are infinite; and the same is the case with the discovery of new properties of nature, of new powers and laws, by continued experience and its rational combination. But limits cannot be mistaken here, for mathematic refers to *phenomena* only, and what cannot be an object of sensuous intuition, such as the concepts of metaphysic and of morals, lies entirely without its sphere, and it can never lead to them; neither does it require them. It is therefore a continual progress and an approximation towards these

sciences, and, as it were, a point or line of contact. Natural philosophy will never discover to us the internal constitution of things, which is not phenomenon, yet can serve as the ultimate ground of explanation of phenomena; but that science does not require this for its physical explanations. Nay even if such grounds should be offered from other sources (for instance, the influence of immaterial beings), they must be rejected and not used in the progress of its explanations. For these explanations must only be grounded upon that which as an object of sense can belong to experience, and be brought into connexion with our actual perceptions and empirical laws.

But Metaphysic leads us towards bounds in the dialectical attempts of pure reason (not undertaken arbitrarily or wantonly, but excited by the nature of reason itself). And the transcendental Ideas, as they do not admit of evasion, and are never capable of realisation, serve to point out to us actually not only the bounds of the pure use of reason, but also the way to determine them. Such is the end and the use of this natural predisposition of our reason, which has brought forth Metaphysic as its pet, whose generation, like every other in the world, is not to be ascribed to blind chance, but to an original germ, wisely organised for great ends. For Metaphysic, in its fundamental features, perhaps more than any other science, is placed in us by nature itself, and cannot be considered the production of a voluntary choice or a casual enlargement in the progress of experience from which it is quite distinct.

Reason finds of itself no satisfaction by all its concepts and laws of the understanding, which suffice for empirical use, or within the sensible world, as ever-recurring questions deprive us of all hope of their complete solution. The transcendental Ideas, which have that completion in

view, are such problems of Reason. But it sees clearly, that the sensuous world cannot contain this completion, neither consequently can all the concepts, which serve merely for understanding the world of sense, such as space and time, and whatever we have adduced under the name of pure concepts of the understanding. The sensuous world is nothing but a chain of phenomena connected according to universal laws; it has therefore no subsistence by itself; it is not the thing in itself, and consequently must point to that which contains the basis of this experience, to beings which cannot be cognised merely as phenomena, but as things *per se*. In the cognition of them alone reason can hope to satisfy its desire of completeness in proceeding from the conditioned to its conditions.

We have indicated (§§ 33, 34) the limits of reason with regard to all cognition of mere creatures of thought. Now only—since the transcendental Ideas compel us to approach them, and so have led us, as it were, only to the contact of the full space (of experience) with the void (of which we can know nothing, *noumena*)—now only we can determine the bounds of pure reason. For in all bounds there is something positive (*e.g.* a surface is the boundary of corporeal space, and is therefore itself a space, a line is a space, which is the boundary of the surface, a point the boundary of the line, but yet always a place in space), whereas limits contain mere negations. The limits pointed out in those paragraphs are not enough after we have discovered that beyond them there still lies something (though we can never cognise what it is in itself). For the question now is, What is the attitude of our reason in this connexion of what we know with what we do not, and never shall, know? This is an actual connexion of a known thing with one quite unknown (which will always remain so), and though what

is unknown should not become the least more known—which we cannot even hope—yet the notion of this connexion must be definite, and capable of being rendered distinct.

We must therefore conceive an immaterial being, an intelligible world [*Verstandeswelt*], and a Supreme Being (mere *noumena*), because in them only, as things in themselves, Reason finds that completion and satisfaction, which it never can hope for in the derivation of phenomena from their homogeneous grounds, and because these actually refer to something distinct from them (and totally heterogeneous), as phenomena always presuppose a thing *per se*, and therefore indicate it, whether we can know more of it or not.

But as we can never cognise these beings of understanding as they are *per se*, that is, determinately, yet must assume them as regards the sensible world, and connect them with it by reason, we are at least able to think this connexion by means of such concepts as express their relation to the world of sense. Yet if we represent to ourselves a being of the understanding by nothing but pure concepts of the understanding, we then indeed represent nothing determinate to ourselves, consequently our concept has no signification; but if we think it by properties borrowed from the sensuous world, it is no longer a being of understanding, but is conceived as a phenomenon, and belongs to the sensible world. Let us take an instance from the notion of the Supreme Being.

Our notion of the *Deity* [*deistischer Begriff*] is quite a pure concept of Reason, but represents only a thing containing all realities, without being able to determine any one of them; because for that purpose an example must be taken from the sensuous world, in which case we

should have an object of sense only, not something quite heterogeneous, which cannot be such. For suppose I attribute to the Supreme Being understanding, for instance; I have no concept of an understanding other than my own, one that must receive intuitions by the senses, and which is occupied in bringing them under rules of the unity of consciousness. Then the elements of my concept would always lie in the phenomenon; I should however by the insufficiency of the phenomena be necessitated to go beyond them to the concept of a being which neither depends upon phenomena, nor is bound up with them as conditions of its determination. But if I separate understanding from sensibility to obtain a pure understanding, then nothing remains but the mere form of thinking without intuition, by which form alone I can cognise nothing determinate, and consequently no object. For that purpose I must conceive another understanding, which should intuit objects, but of which I have not the least notion; because the human understanding is discursive, and can only cognise by means of general concepts. And the very same difficulties arise if we attribute a will to the Supreme Being; for we have this concept only by drawing it from our internal experience, and therefore from our dependence for satisfaction upon objects whose existence we require; and so the notion rests upon sensibility, which is totally repugnant to the pure concept of the Supreme Being.

Hume's objections to deism are weak, and affect only the proofs, and not the deistical assertion itself. But as regards theism, which depends on a stricter determination of the Deist's merely transcendent concept of the Supreme Being, they are very strong, and after [or according as] this concept is formed, in certain (in fact in

all common) cases irrefragable. Hume always insists, that by the mere concept of an original being, to which we apply only ontological predicates (eternity, omnipresence, omnipotence), we think nothing determinate, and that properties which can yield a concept *in concreto* must be superadded; that it is not enough to say, it is Cause, but we must explain the nature of its causality, for example, that of an understanding and of a will. He then begins his attacks on the assertion itself, theism, as he had previously directed his battery only against the proofs of deism, an attack which is not very dangerous in its consequences. All his dangerous arguments refer to anthropomorphism, which he holds to be inseparable from theism, and to make it absurd in itself; but if the former be abandoned, the latter must vanish with it, and nothing remain but deism, of which nothing can come, which is of no value, and which cannot serve as any foundation to religion or morals. If this anthropomorphism were really unavoidable, no proofs whatever of the existence of a Supreme Being, even were they all granted, could determine for us the concept of this Being without involving us in contradictions.

If we connect with the command to avoid all transcendent judgments of pure reason, the command (which apparently conflicts with it) to proceed to concepts that lie beyond the field of its immanent (empirical) use, we discover that both can subsist together, but exactly at the *boundary* of all lawful use of reason. For this boundary belongs as well to the field of experience, as to that of the beings of thought, and we are thereby taught, as well, how these so remarkable Ideas serve merely for marking the bounds of human reason. [Thus we are told] on the one hand not to extend cognition of experience without bounds, as if nothing but mere world remained for us to cognise,

and yet, on the other hand, not to transgress the bounds of experience, or to think of judging about things beyond them, as things in themselves.

But we stop at this boundary if we limit our judgment merely to the relation which the world may have to a Being whose very concept lies beyond all the knowledge which we can attain within the world. For we then do not attribute to the Supreme Being any of the properties *in themselves*, by which we represent objects of experience, and thereby avoid *dogmatic* anthropomorphism; but we attribute them to His relation to the world, and allow ourselves a *symbolical* anthropomorphism, which in fact concerns language only, and not the object itself.

If I say that we are compelled to consider the world, *as if* it were the work of a Supreme Understanding and Will, I really say nothing more, than that a watch, a ship, a regiment, bears the same relation to the watchmaker, the shipbuilder, the commanding officer, as the world of sense (or whatever constitutes the substratum of this complex of phenomena) does to the Unknown, which I do not hereby cognise as it is in itself, but as it is for me or in relation to the world, of which I am a part.

§ 58. Such a cognition is *analogical*, which does not signify, as is commonly understood, an imperfect similarity of two things, but a perfect similarity of relations between two quite dissimilar things.¹ By means of this analogy,

¹ There is an analogy between the juridical relation of human actions and the mechanical relation of motive powers; I never can do anything to another man without giving him a right to do the same to me on the same conditions; as no body can act with its motive power on another body without thereby occasioning the other to react equally against it. Here right and motive power are quite dissimilar things, but in their relation there is complete similarity. By means of such an analogy I can obtain a notion of the relation of things which absolutely are

however, there remains a concept of the Supreme Being sufficiently determined *for us*, though we have left out everything that could *determine it absolutely or in itself*; for we determine it as regards the world and as regards ourselves, and more we do not require. The attacks which Hume makes upon those who would determine this concept absolutely, by taking the materials for so doing from themselves and the world, do not affect us; and he cannot object to us, that we have nothing left if we give up the objective anthropomorphism of the concept of the Supreme Being.

For let us assume at the outset (as Hume in his dialogues makes Philo grant Cleanthes), as a necessary hypothesis, the *deistical* concept of the First Being in which this Being is thought by the mere ontological predicates of substance, of cause, etc. *This must be done*, because reason, actuated in the sensible world by mere conditions, which are themselves always conditional, cannot otherwise have any satisfaction, and *it therefore can be done* without falling into anthropomorphism (which transfers predicates from the world of sense to a Being quite distinct from the world), as those predicates [which we propose to use] are mere categories, which, though they do not give a determinate concept of Him, yet give a concept not limited to any conditions of sensibility. [Granting this then] nothing can prevent our predicating of this Being *a causality*

unknown to me. For instance, as the promotion of the fortune of children (=a) is to the love of parents (=b), so the welfare of the human species (=c) is to that unknown [quality] in God (=x), which we call love; not as if it had the least similarity to any human inclination, but because we can suppose its relation to the world to be similar to that which things of the world bear one another. But the concept of relation in this case is a mere category, viz. the concept of cause, which has nothing to do with sensibility.

through Reason with regard to the world, and thus passing to theism, without being forced to attribute to Him in Himself this Reason, as a property inhering in Him. For as to *the former*, the only possible way of prosecuting the use of reason in the world of sense (as regards all possible experience, in complete harmony with itself), to the highest point, is to assume a Supreme Reason as a cause of all the connexions in the world: such a principle must be thoroughly advantageous to our Reason, but can hurt it nowhere in its natural use. *Secondly*, Reason is thereby not transferred as a property to the First Being in Himself, but to *His relation* to the world of sense, and so anthropomorphism is entirely avoided. For nothing is considered here but the *Cause* of the rational form [*Vernunftform*], which is perceived everywhere in the world, and reason is attributed to the Supreme Being, so far as it contains the ground of this rational form of the world, but analogically only, that is, so far as this expression shows merely the relation, which the Supreme Cause unknown to us has to the world, in order to determine everything in it conformably to reason in the highest degree. We are thereby kept from using this [human] attribute, Reason, for the purpose of conceiving *God* by means of it, instead of conceiving *the world* in the manner which is necessary, in order to have the greatest possible systematic use of reason *with regard to it*.¹ We thereby acknowledge, that the Supreme Being is quite inscrutable and even incogitable *in any determinate way* as to what He is *per se*. We are thereby kept, on the one hand, from making a transcendent use of the concepts which we have of reason as an efficient cause (by means of the will), in order to determine

¹ This whole section is very inaccurately and confusedly written. The italics in this sentence are mine. M.

the Divine Nature by properties, which are only borrowed from human nature, and from losing ourselves in gross and extravagant notions; and on the other hand [we are kept] from deluging the contemplation of the world with hyper-physical modes of explanation according to our notions of human reason, which we transfer to God, and so losing for this contemplation its proper destination, according to which it should be a rational study of mere nature, and not a presumptuous derivation of its phenomena from a Supreme Reason. The expression suited to our feeble notions is, that we conceive the world *as if* it came, as to its existence and internal determination, from a Supreme Reason, by which notion we both cognise the constitution, which belongs to it (the world) itself, yet without pretending to determine the nature of its cause *per se*, and on the other hand we place the ground of this constitution (of the rational form in the world) *in the relation* of the Supreme Cause to the world, without finding the world sufficient by itself for that purpose.¹

And thus the difficulties, which seem to oppose theism, disappear by combining with Hume's principle—'not to carry the use of reason dogmatically beyond the field of all possible experience'—this other principle, which he quite overlooked: 'not to consider the field of experience as one which bounds itself in the eye of our reason.' The *Kritik of pure Reason* here points out the true mean between

¹ I may say, that the causality of the Supreme Cause holds the same place with regard to the world that human reason does with regard to its works of art. Here the nature of the Supreme Cause itself remains unknown to me: I only compare its effects (the order of the world) which I know, and their conformity to reason, to the effects of human reason which I also know; and hence I term the former reason, without attributing to it on that account what I understand in man by this term, or attaching to it anything else known to me, as its property.

dogmatism, which Hume combats, and scepticism, which he would substitute for it—a mean which is not like other means that we find advisable to determine for ourselves as it were mechanically (by adopting something from one side and something from the other), and by which nobody is taught a better way, but such a one as can be accurately determined on principles.

§ 59. At the beginning of this observation I made use of the metaphor of a *boundary*, in order to establish the limits of reason in regard to its suitable use. The world of sense contains merely phenomena, which are not things in themselves, which (*noumena*) therefore the understanding (because it cognises the objects of experience as mere phenomena) must assume. In our Reason both are comprised, and the question is, How does reason proceed to bound the understanding as regards both these fields? Experience, which contains all that belongs to the sensuous world, does not bound itself; it only attains from every conditioned to some other equally conditioned object. Its boundary must lie quite without it, and this field is that of the pure beings of the understanding. But this field, so far as the *determination* of the nature of these beings is concerned, is an empty space for us, and if dogmatically-determined concepts alone are in question, we cannot pass out of the field of possible experience. But as a boundary itself is something positive, which belongs as well to that which lies within, as to the space that lies without the given complex, it is still an actual positive cognition, which reason only acquires by enlarging itself to this boundary, yet without attempting to pass it; because it there finds itself in presence of an empty space, in which it can conceive forms of things, but not things themselves. But the *bounding* of the field of the understanding by something, which is otherwise unknown

to it, is still a cognition which remains to reason even at this standpoint, and by which it is neither shut up within the sensible, nor does it stray without it, but confines itself, as befits the knowledge of a boundary, to the relation between that which lies without it, and that which is contained within it.

Natural theology is a concept of this sort at the boundary of human reason, because we are obliged to look beyond this boundary to the Idea of Supreme Being (and, in morals to that of an intelligible world also). [We do this] not in order to determine anything relatively to this mere being of the understanding, and consequently beyond the world of sense, but in order to guide the use of reason within that world according to principles of the greatest possible unity (theoretical as well as practical). For this purpose we make use of the reference of the world of sense to a self-sufficient reason, as the cause of all its connexions. But [we do this] not in order merely to invent a being for ourselves, but, as beyond the sensible world there must be something thought only by the pure understanding, to *determine* that something in this particular way, though only of course according to analogy.

And thus there remains our original proposition, which is the result of the whole *Kritik*: 'that reason by all its *a priori* principles never teaches us anything more than objects of possible experience, and even of these nothing more than can be cognised in experience.' But this limitation does not prevent the reason leading us to the objective *boundary* of experience, viz. to the *reference* to something which is not itself an object of experience, but is the ground of all experience. Reason does not however teach us anything concerning the thing in itself: it only instructs us as regards its own complete and noblest use in

the field of possible experience. But this is all that can be reasonably desired in the present case, and with this we have cause to be satisfied.

§ 60. Thus we have fully exhibited Metaphysic as it is actually given in the *natural predisposition* of human reason, and in that which constitutes the essential end of its pursuit, [and have explained it] according to its subjective possibility. Yet we have found, that this *merely natural* use of such a predisposition of our reason, if no discipline arising only from a scientific Kritik bridles and sets limits to it, involves us in transcendent, either apparently or really conflicting, *dialectical* syllogisms. We have also found this fallacious Metaphysic not only unnecessary as regards the promotion of our knowledge of nature, but even disadvantageous to it. There still therefore remains a problem worthy of solution, to find out the *natural ends* intended by this disposition to transcendent concepts in our reason, because everything that lies in nature must be originally intended for some useful purpose.

Such an inquiry is here out of place; and I acknowledge, that what I can say about it is conjecture only, like every speculation about the first ends of nature. It may be allowed me in this case only, as the question does not concern the objective validity of metaphysical judgments, but our natural predisposition to them, and therefore belongs to anthropology, outside the system of Metaphysic.

When I compare all the transcendental Ideas, the complex of which constitutes the peculiar problem of natural pure reason, and compels it to quit the mere contemplation of nature, to transcend all possible experience, and in this endeavour to produce the thing (be it knowledge or nonsense) called Metaphysic, I think I perceive that the aim of this natural tendency is, to free our notions from

the fetters of experience and from the limits of the mere contemplation of nature so far as at least to open to us a field, which contains mere objects for the pure understanding, that no sensibility can reach. [We do this] not indeed with the view of speculatively occupying ourselves with them (because we can find no ground to stand on), but because practical principles, without finding some such scope for their necessary expectation and hope, could not expand to the universality, which reason unavoidably requires from the moral point of view.

So I find that the *Psychological Idea* (however little it may reveal to me the nature of the human soul, which is pure and raised above all concepts of experience), yet shows the insufficiency of these concepts plainly enough, and thereby deters me from materialism, as a notion unfit for any explanation of nature, and, besides, confining reason [unduly] in the practical direction. The *Cosmological Ideas*, by the obvious insufficiency of all possible cognition of nature to satisfy reason in its lawful inquiry, serve in the same manner to keep us from naturalism, which asserts nature to be sufficient for itself. Finally, all natural necessity in the sensible world is conditional, as it always presupposes the dependence of things upon others, and unconditional necessity must be sought only in the unity of a cause distinguished from the world of sense. But as the causality of this cause, in its turn, were it merely nature, could never render the existence of the contingent (as its consequent) comprehensible, Reason frees itself by means of the *Theological Idea* from fatalism (both as a blind natural necessity in the coherence of nature itself, without a first principle, as well as a blind causality of this principle itself), and leads to the concept of a cause possessing freedom, or of a Supreme Intelligence. So the transcendental Ideas

serve, if not to instruct us positively, at least to destroy the rash assertions of *Materialism*, of *Naturalism*, and of *Fatalism*, and thus to afford scope for the moral Ideas beyond the field of speculation. These considerations, I should think, explain in some measure the natural predisposition of which I spoke.

The practical value, which a merely speculative science may have, lies without the [strict] bounds of this science, and can therefore be considered as a *scholion* merely, and like all scholia does not form part of the science itself. This application however surely lies within the bounds of philosophy, especially of philosophy drawn from the pure sources of reason, where its speculative use in Metaphysic must necessarily be at unity with its practical use in morals. Hence the unavoidable dialectic of pure reason, considered in Metaphysic as a natural tendency, deserves to be explained not as an illusion merely, which is to be removed, but also, if possible, as a *natural provision* as regards its end, though this duty, a work of supererogation, cannot justly be assigned to Metaphysic proper.

The solutions of the questions which occupy from page 410 of the *Kritik* to page 432, should be considered a second *scholion*, which however has a greater affinity with the content of Metaphysic. For there certain rational principles are expounded, which determine *a priori* the order of nature or rather of the understanding, which seeks nature's laws through experience. They seem to be constitutive and legislative with regard to experience, though they spring from mere Reason, which cannot be considered, like the understanding, as a principle of possible experience. Now does this harmony rest upon the fact, that just as nature does not inhere in phenomena or in their source (the sensibility) *per se*, but only in so far as the latter is in

relation to the understanding, so thorough unity in applying the understanding to obtain a collective possible experience (in a system) can only belong to the understanding when in relation to Reason? and is experience in this way mediately subordinate to the legislation of Reason? The answer may be discussed by those who desire to trace the nature of reason even beyond its use in Metaphysic, into the general principles of systematising a history of nature; I have represented this problem as important, but not attempted its solution, in the book itself.¹

And thus I conclude the analytical solution of the problem I had proposed: How is metaphysic in general possible? by ascending from the facts, where the use of the science is actually given, at least in its consequences, to the grounds of its possibility.

¹ It was my constant design through the *Kritik* to neglect nothing, were it ever so dark, that could complete the inquiry into the nature of pure reason. Everybody may afterwards carry his researches as far as he pleases, when he has been merely shown what yet remains to be done, a duty reasonably to be expected from those who have made it their business to survey the whole of this field, in order to consign it to others for future allotment and cultivation. And to this branch both the *scholia* belong, which will hardly recommend themselves by their dryness to amateurs, and hence are added for competent judges only.

SOLUTION OF THE GENERAL QUESTION OF THE PROLEGOMENA

How is Metaphysic possible as a Science?

METAPHYSIC, as a natural tendency of reason, is actual, but when isolated (as the analytical solution of the third principal question showed) dialectical and illusory. If we think of taking principles from it, and following in their use the natural, but on that account not less false, illusion, we can therefore never produce science, but only a vain dialectical art, in which one school may overcome another, but none can ever acquire a just and lasting approbation.

In order that as a science it may claim not mere fallacious plausibility, but insight and conviction, a *Kritik of the Reason* must itself exhibit the whole stock of *a priori* concepts, their division according to their various sources (Sensibility, Understanding, and Reason), together with a complete table of them, and the analysis of all these concepts, with all their consequences.

It must also exhibit, especially by means of the deduction of these concepts, the possibility of synthetical cognition *a priori*, the principles of its use, and finally its bounds, all in a complete system.¹ *Kritik* therefore,

¹ I may note, as a specimen of Kant's style, that in the original there are seventy-two words in this paragraph between the subject and the verb. M.

and *Kritik* alone, contains in itself the whole well proved and tested plan, and even all the means required to accomplish Metaphysic as a science; by other ways and means it is impossible. The question here therefore is not so much how this performance is possible, as how to set it going, and induce men of clear heads to quit their hitherto perverted and fruitless cultivation for one that will not deceive, and how such a union for the common end may best be directed.

This much is certain, that whoever has once tasted Kritik, will be ever after disgusted with all dogmatical slops, which he formerly put up with, because his reason must have something, and could find nothing better for its support. Kritik stands in the same relation to the common Metaphysic of the schools, as *chemistry* does to *alchemy*, or as *astronomy* to prognosticating *astrology*. I pledge myself, that nobody who has read through and through, and grasped the principles of, the *Kritik*, even in these Prolegomena only, will ever return to that old and sophistical mock science; but will rather with a certain delight look forward to Metaphysic, which is now indeed in his power, and requires no more preparatory discoveries, and which can at last afford permanent satisfaction to reason. For here is an advantage upon which, of all possible sciences, Metaphysic alone can with certainty reckon: that it can be brought to such completion and fixity as to be incapable of further change, or of any augmentation by new discoveries; because here reason has the sources of its knowledge not in objects and their intuition (by which too it cannot be further informed), but in itself. When therefore it has exhibited the fundamental laws of its faculty completely, and so determinately as to avoid all misunderstanding, there remains nothing for pure reason to cognise *a priori*, nay,

even for it to inquire into on [reasonable] grounds. The sure prospect of knowledge so determinate and so self-contained¹ has a peculiar charm, even though we should set aside all its advantages, of which I shall hereafter speak.

All false art, all vain wisdom lasts its time, but finally destroys itself, and its highest culture is also the epoch of its decay. That this time is come for Metaphysic appears from the state into which it has fallen among all learned nations, despite of all the zeal with which other sciences of every kind are prosecuted. The old arrangement of our university studies still preserves its shadow ; a single Academy of Sciences tempts men now and then, by offering prizes, to write essays on it, but it is no longer numbered among thorough sciences ; and let any one judge for himself how a man of parts, if he were called a great metaphysician, would receive the compliment, which may be well-meant, but is scarce envied by anybody.

Yet, though the period of the downfall of all dogmatical metaphysic has undoubtedly arrived, we are yet far from being able to say, that the period of its regeneration is come by means of a thorough and complete *Kritik of the Reason*. All transitions from a tendency to its contrary pass through the stage of indifference, and this moment is the most dangerous for the author, but, in my opinion, the most favourable for the science. For, when party spirit has died out by a total dissolution of former connexions, minds are in the best state to receive, but gradually, proposals for a combination according to a new plan.

When I say, that I hope these Prolegomena will excite investigation in the field of Kritik, and afford a new and promising object to sustain the general spirit of philosophy,

¹ This word does not adequately render the untranslatable original *Geschlossenes*. M.

which seems on its speculative side to want sustenance, I can imagine beforehand, that every one, whom the thorny paths of my *Kritik* have tired and put out of humour, will ask me, upon what I found this hope? My answer is, *upon the irresistible law of necessity.*

That the human mind will ever give up metaphysical researches entirely is as little to be expected as that we should prefer to give up breathing altogether, to avoid inhaling impure air. There will therefore always be Metaphysic in the world; nay every one, especially every man of reflection, will have it, and for want of a recognised standard, will shape it for himself after his own pattern. What has hitherto been called Metaphysic, cannot satisfy any accurate mind, but to forego it entirely is impossible; therefore a *Kritik of Pure Reason* itself must now be *attempted* or, if one exists, *investigated*, and brought to the full test, because there is no other means of supplying this pressing want, which is something more than mere thirst for knowledge.

Ever since I have come to know *Kritik*, when I have finished reading a book of metaphysical contents, which, by the preciseness of its notions, by variety, order, and an easy style, was not only entertaining but improving, I cannot refrain from asking, *Has this author indeed advanced Metaphysic a single step?* The learned men, whose works have been useful to me in other respects and always contributed to the culture of my mental powers, will, I hope, forgive me for saying, that I have never been able to find either their essays or my own less important ones (though self-love may recommend them to me) to have advanced the science in the least. And here is the very obvious reason: that the science did not then exist, and cannot be gathered piecemeal, but its germ must be fully preformed in the *Kritik*. But in order to prevent all misconception, we must remember

what has been already said, that by the analytical treatment of our concepts the understanding gains indeed a great deal, but the science (of metaphysic) is not the least advanced, because these dissections of concepts are nothing but the materials from which the science still remains to be built. Let the concepts of substance and of accident be ever so well dissected and determined, all this is very good as a preparation for some future use. But if we cannot prove, that in all which exists the substance endures, and only the accidents vary, science is not the least advanced by all our analyses. Metaphysic has hitherto never been able to prove *a priori* either this proposition, or that of Sufficient Reason, still less any more complex one, such as belongs to [rational] psychology or cosmology, or indeed any synthetical proposition. By all its analysis therefore nothing is affected, nothing obtained or forwarded, and the science, after all this bustle and noise, still remains as it was in the days of Aristotle, though far better preparations were made for it than of old, if the clue to synthetical cognitions had only been discovered.

If any one thinks himself insulted, he may easily refute my charge by producing a single synthetical proposition belonging to Metaphysic, which he proposes to prove dogmatically *a priori*, for until he has performed this feat, I shall not grant that he has actually advanced the science; even should that proposition be sufficiently confirmed by common experience. No demand can be more moderate or more equitable, and in the (infallibly certain) event of its non-performance, no assertion more just, than that hitherto Metaphysic has never existed as a science.

But there are two things which, in case the challenge be accepted, I must deprecate: first, trifling about *probability* and conjecture, which are suited as little to metaphysic, as

to geometry ; and secondly, the decision by means of the wand of *sound common sense*, which every one does not wave, but which accommodates itself to personal peculiarities.

For *as to the former*, nothing can be more absurd, than in Metaphysic, a philosophy from pure reason, to think of grounding our judgments upon probability and conjecture. Everything that is to be cognised *a priori*, is thereby announced as apodeictically certain, and must therefore be proved in this way. We might as well think of grounding geometry or arithmetic upon conjectures ; for as to the doctrine of chances in the latter, it does not contain probable, but perfectly certain judgments concerning the degree of the probability of certain cases, under given uniform conditions, which, in the sum of all possible cases, infallibly happen according to the rule, though it is not sufficiently determined in respect to every single chance. Conjectures (by means of induction and of analogy) can be suffered in an empirical science of nature only, yet even there the possibility at least of what we assume must be quite certain.

The appeal to sound sense is even more absurd, when concepts and principles are announced as valid, not in so far as they hold with regard to experience, but even beyond the conditions of experience. For what is *sound sense* [Verstand] ? It is *common sense*, so far as it judges right. But what is common sense ? It is the faculty of the knowledge and use of rules *in concreto*, as distinguished from the *speculative understanding*, which is a faculty of knowing rules *in abstracto*. Common sense can hardly understand the rule, 'that every event is determined by means of its cause,' and can never comprehend it thus generally. It therefore demands an example from experience, and when it hears that this rule means nothing but what it always thought

when a pane was broken or a kitchen-utensil missing, it then understands the principle and grants it. Common sense therefore is only of use so far as it can see its rules (though actually present in it *a priori*) confirmed by experience; consequently to comprehend them *a priori*, or independently of experience, belongs to the speculative understanding, and lies quite beyond the horizon of common sense. But the province of Metaphysic is entirely confined to the latter kind of knowledge, and it is certainly a bad index of sound sense to appeal to the witness, which cannot here form any opinion whatever, and on which men look down with contempt until they are in difficulties, and can find in their speculation neither counsel nor help.

It is a common subterfuge of those false friends of common sense (who occasionally prize it highly, but usually despise it) to say, that there must surely be at all events some propositions, which are immediately certain, and of which there is no occasion to give any proof, or even any account at all, because we otherwise could never stop inquiring into the grounds of our judgments.¹ But if we except the principle of contradiction, which is not sufficient to show the truth of synthetical judgments, they can never adduce, in proof of this privilege, anything else indubitable, which they can immediately ascribe to common sense, except mathematical propositions, such as twice two make four, between two points there is but one straight line, etc. But these are judgments immensely distinct from those of Metaphysic. For in Mathematic I myself can by thinking make (construct) whatever I represent to myself as possible by a concept: I add to the first two the other two, one by one, and myself make the number four, or I draw in thought

¹ These remarks are probably written with the Scottish School in view. M.

from one point to another all manner of lines, and can draw one only, which is like itself in all its parts (equal as well as unequal). But I cannot, by all my power of thinking, extract from the concept of a thing the concept of something else, whose existence is necessarily connected with the former, but must call in experience. And though my understanding furnishes me *a priori* (yet only in reference to possible experience) with the concept of such a connexion (of causation), I cannot exhibit it, like the concepts of mathematic, by intuition, *a priori*, and so show its possibility *a priori*. So this concept, together with the principles of its application, always requires, if it shall hold *a priori*—as is requisite in Metaphysic—a justification and deduction of its possibility, because we cannot otherwise know how far it holds good, and whether it can be used in experience only or beyond it also. In Metaphysic, then, as a speculative science of pure reason, we can never appeal to common sense, but may only do so when we are forced to quit it, and to give up all pure speculative cognition (which must always be science), and consequently [to give up] metaphysic itself, and its instruction. [This may happen] on certain occasions, when a reasonable faith only is found possible for us, and sufficient to our wants (perhaps even more salutary than science itself). For in this case the attitude of the question is quite altered. Metaphysic must be science not only as a whole, but in all its parts, otherwise it is nothing; because, as a speculation of pure reason, it has a footing nowhere else than on general views. Beyond it, however, probability and sound sense may be used with advantage and justly, but on quite special principles, of which the importance always depends on the reference to practice.

This is what I hold myself justified in requiring for the possibility of Metaphysic as a science.

APPENDIX

On what can be done to make Metaphysic actual as a Science

As no means hitherto used have attained this end, which without a preceding Kritik of pure reason will never be attained, it is fair to expect that the essay, which is now before the public, should be submitted to an accurate and careful scrutiny, except it be thought more advisable to give up all pretensions to Metaphysic, in which case, if men but adhere to their purpose, nothing can be said against it. If we take the course of things as it is, not as it ought to be, there are two sorts of judgments, *one a judgment which precedes investigation*—in our case one in which the reader from his own Metaphysic pronounces judgment on the *Kritik of Pure Reason* (which was intended to discuss the very possibility of Metaphysic). The other is a judgment *subsequent to investigation*, in which the reader is enabled to waive for awhile the consequences of the critical researches that may be repugnant to his formerly adopted Metaphysic, and first examines the grounds whence those consequences are derived. If what common Metaphysic propounds were demonstrably certain (like geometry, for instance), the former way of judging would hold good; for if the consequences of certain principles are repugnant to established truths, these principles are false, and without further inquiry

to be repudiated. But if Metaphysic does not possess a stock of indisputably certain (synthetical) propositions, and should it even be the case that there are a number of them, which, though among the most specious, are by their consequences in mutual collision, and if no sure criterion of the truth of peculiarly metaphysical (synthetical) propositions is to be met with in it, then the former way of judging cannot obtain, but the investigation of the principles of the *Kritik* must precede all judgment as to its value.

SPECIMEN OF A JUDGMENT ON THE *KRITIK* PRIOR TO ITS EXAMINATION

Such may be found in the *Göttingen gelehrte Anz.* (19th Jan. 1782).

WHEN an author who understands his work, and has taken care to think it out independently, falls into the hands of a reviewer acute enough to perceive the points of real moment in determining the merit or demerit of the book, who attends not to the words but to the matter, and does not merely weigh the principles from which the author started—in such case the latter may dislike his verdict, but the public, who only gains by it, need not care: and even the author may be content to take the opportunity of reconsidering the positions criticised in good time by a good authority, and thus, should the objections be well grounded, of removing any rock of offence which might damage the work.

This is not my present position. My critic does not seem to have an inkling of what my inquiry (successful or not) aimed at attaining. It may be want of patience to toil through a voluminous book, or annoyance at a proposed reform in a science concerning which he had long since satisfied himself, or (what I do not willingly surmise) a narrow view which cannot rise above the ordinary metaphysic of the schools. Whatever the cause, he goes

through a long row of propositions, which nobody would understand without the premises leading up to them, dispenses here and there his censure, which is as incomprehensible as the statements censured, and so neither profits the public by information, nor damages me the least in the minds of experts. I should therefore have passed it by in silence, except that it gives me the opportunity of explanations which may save the readers of my *Prolegomena* from some possible mistakes.

In order to take up a position from which he could give an unfavourable view of the whole book, without condescending to any particular inquiry, the reviewer begins and ends with saying, "this work is a system of transcendent (or as he translates it, of higher)¹ idealism." A glance at this statement told me what I might expect—something like as if a man who had never heard of geometry had suddenly found a Euclid, and being asked to review it, were to turn over the leaves and find many figures, and then say: "The book is a systematic lesson-book in drawing; but the author uses a peculiar language to give dark and obscure precepts, which after all can do no more than any one can attain with a good eye, etc."

But let us see what sort of idealism runs through my whole work, though it is far from being the soul of my system.

¹ By no means *higher*. High towers, and their human rivals in metaphysic, both with so much wind about them, are not in my line. My place is the fruitful low ground [*bathos*] of experience; and the word *transcendental*, whose repeated explanation in my book he has never even grasped—so hurriedly did he read me—does not mean anything transcending all experience, but its *a priori* condition, with no other purpose than to make empirical cognition merely possible. When these concepts transcend experience, their employment becomes transcendent, which is distinguished from their immanent use confined to experience. All this I had carefully guarded against; but the reviewer found it his advantage to misunderstand me.

The position of all genuine idealists from the Eleatics to Berkeley is this: All cognition through the senses and experience is nothing but mere illusion, and only in the ideas of the pure Understanding and the Reason is there truth. The fundamental principle ruling all my idealism, on the contrary, is this: All cognition of things from mere pure Understanding and Reason is nothing but mere illusion and only in experience is there truth.

But this is the very opposite of that other proper idealism. How did I come to use this term for a directly opposite purpose, and how did the reviewer come to see it everywhere?

The solution of this difficulty depends upon something easy to take out of the connected work, if you choose to do it. Space and time, with all that they contain, are not things or their properties *per se*, but belong to the phenomena of things. So far I agree with every idealist. But these, especially Berkeley, regarded space as a mere empirical representation, which along with all its determinations is known, like what appears in it, only through experience or perception. I was the first to show that space (and time, which Berkeley overlooked) with all its determinations is known by us *a priori*, because it and time are in us as pure forms of sensibility before all perception or experience, and make all intuition and consequently all phenomena possible. Hence it follows that as truth rests on universal and necessary laws as its criteria, experience can have in Berkeley's system no criteria of truth, because there is nothing *a priori* at the basis of its phenomena; and further it follows that all experience is mere illusion, whereas with me space and time (in connection with the Categories) prescribe *a priori* the law of all possible experience, and this law gives us the sure

criterion for distinguishing truth from illusion.¹ My so-called (critical) idealism is thus quite peculiar, in that it overthrows ordinary idealism, and that through it all *a priori* cognition, even that of geometry, now attains objective reality, a thing which even the keenest realist could not assert till I had proved the ideality of space and time. I wish I could call this attitude of mine by some other name, to avoid all such misapprehensions, but a complete change seems to me impracticable. I may therefore in future be allowed to call it, as above explained, formal, or rather critical, idealism, to distinguish it from the dogmatic of Berkeley, and the sceptical of Descartes.

I find nothing further of note in this estimate of my book.² The critic deals throughout in broad generalities—a wise course, because the writer does not betray the amount of his own knowledge or ignorance; a single criticism in detail, affecting, as it ought, the main questions of the book, would have exposed perhaps my error, perhaps also the amount of insight the reviewer possessed into questions of this kind. It was no bad device, for the purpose of deterring at once readers accustomed to rely on reviews for their opinion of books, to enumerate a number of statements, which must necessarily have seemed absurd when torn from their connexion with proofs and explanations, and which, moreover, conflict violently with current

¹ Idealism proper has always, and necessarily, a mystical tendency, but mine only aims at comprehending the possibility of knowing the things of experience *a priori*—a problem never solved, nay, never even proposed. This disposes of mystical idealism, which (as Plato shows) infers from our *a priori* cognitions (even in geometry) another (viz. intellectual) intuition, differing from that of the senses, because no one dreamt that the senses could have any *a priori* intuition.

² Not 'the judgment of the book in question,' as Mr. Bax translates, evidently supposing it to be some work of Garve. M.

metaphysic. So the reader's patience is disgusted, and after I am taught the profound statement, that persistent illusion is truth—then comes the blunt patronising conclusion: Why this attack on the received use of words; wherefore this idealistic distinction? This judgment, which began with making metaphysical heresies the main point of my book, ends by reducing it to mere innovations of language, and shows clearly that my would-be judge knows nothing about the subject, and even misunderstands his own arguments.¹

The reviewer talks like a man possessed of important news, which he keeps concealed from the public, though I know of nothing which has lately appeared in metaphysics to warrant such an attitude. It is very wrong of him to withhold his discoveries for . . . the world is tired of metaphysical assertions; what we want is a proof of the possibility of this science, and safe criteria to distinguish the dialectical illusion of the pure reason from truth. I suspect that this requirement has never even come into his head, and . . . support my suspicions by the fact that he is absolutely silent concerning the possibility of synthetic *a priori* knowledge, which is the special problem in the way of metaphysic, and to which my *Kritik* and *Prolegomena* were mainly directed. The idealism at which he caught, and to which he stuck, was only embraced by me as the

¹ The reviewer often fights with his own shadow. When I oppose the truth of experience to dreaming, he never suspects that I am only concerned with the *somnium objective sumtum* of Wolff's philosophy, which is merely formal, and does not regard the distinction of dreaming and waking, which indeed has no place in any transcendental philosophy. Again he calls my Deduction of the Categories and Table of the Principles of the Understanding 'current principles of Logic and Ontology idealistically expressed.' The reader need only consult these *Prolegomena*, to persuade himself, that such a criticism was the most miserable and even historically false which a man could make.

one means of solving that problem (though it may be confirmed from other grounds), and he should have shown, either that the problem does not possess the importance I attached to it, both in *Kritik* and *Prolegomena*, or that it cannot be solved by my view of phenomena, or else be solved better in some other way. . . . Other sciences have their touchstone.¹ But to judge the thing called metaphysic, we must first discover that touchstone, which I have attempted, as well as to apply its use. . . . To bring my defence to a point, I here make an offer, like those often made by the mathematicians, to prove by competition the superiority of their respective methods. I challenge my opponent to prove, of course *a priori*, a single one of the propositions asserted by him to be really metaphysical, *i.e.* synthetical *a priori*, such as the principle of the permanence of substance, or the necessary determination of events by their causes. If he fails in doing this, he must admit that as metaphysic is nothing at all without the demonstrated certainty of such propositions, the possibility or impossibility of the science is the first task of a *Kritik* of pure reason ; either, then, he must confess that my principles are sound, or he must refute them. . . . So sure am I of his failure in any such attempt, that I will even give him the advantage of taking the *onus probandi* on myself.

Here is my challenge. He finds in these *Prolegomena* and *Kritik* eight pieces of contradictory propositions (the Theses and Antitheses of the four Antinomies), each of which belongs necessarily to metaphysic, which must either accept or refute it (though there is probably not a

¹ From this on I have only given the philosophical points in Kant's argument ; the personal allusions are now devoid of interest to the philosophical reader. M.

single one of them which has not in its turn been assumed by some philosopher). He is at liberty to accept any one of these eight, and adopt it with the proof, which I give him into the bargain, and then let him attack my proof of the contrary proposition. If I can protect this latter, and show on principles indispensable to every dogmatical metaphysic that the opposite of his position can be just as clearly maintained, then there must be a radical error in metaphysic not to be explained or removed without going back to the birthplace of metaphysic in the pure reason; so that either my Kritik must be adopted or a better supplied in its place.

If I am not able to maintain my proof, then my opponent has made good at least one synthetical *a priori* proposition on dogmatical grounds; my attack on popular metaphysic was unwarranted, and I bow to his censure.

APPENDICES

CONTAINING

TRANSLATIONS OF THE PRINCIPAL PASSAGES IN THE KRITIK
OF THE PURE REASON ALTERED IN THE SECOND (AND
FOLLOWING) EDITIONS, AND OF PART OF
THE CRITICAL SOLUTION OF THE
THIRD ANTINOMY

- A. ON THE DEDUCTION OF THE CATEGORIES
- B. ON THE DISTINCTION BETWEEN NOUMENA AND PHENOMENA
- C. ON THE PARALOGISMS OF RATIONAL PSYCHOLOGY
- D. ON THE INTELLIGIBLE AND THE EMPIRICAL CHARACTER

APPENDIX A

DEDUCTION OF THE PURE CONCEPTS OF THE UNDERSTANDING

§ 2. *Of the a priori Grounds of the Possibility of Experience*

THAT a concept should be generated completely *a priori*, and have relation to an object, without itself belonging to the [general] notion of possible experience, or being made up of the elements of possible experience¹—this is perfectly self-contradictory and impossible. For such a concept would have no content, because no intuition would correspond to it; since intuitions in general, by which objects are capable of being given to us, make up the field, or total object, of possible experience. A concept *a priori*, which did not refer to such intuitions, would be only the logical form for a concept, but not the very concept itself, through which something is thought.

If there be then pure concepts *a priori*, these indeed can of course contain nothing empirical; they must, nevertheless, be merely *a priori* conditions of possible experience, as upon this alone can their objective reality rest.

¹ By possible experience Kant means that which can possibly become experience. M.

If we wish, then, to know how pure concepts of the understanding are possible, we must inquire what are the *a priori* conditions on which the possibility of experience depends, and which form its foundation, when we abstract from all that is empirical in phenomena. A concept which expresses this formal and objective condition of experience universally and adequately might be denominated a pure concept of the understanding. Having once obtained pure concepts of the understanding, I can, if I like, also excogitate objects, perhaps impossible, perhaps possible *per se*, but given in no experience; since I may omit in the connexion of these concepts something which still necessarily belongs to the conditions of possible experience (*e.g.* the notion of a spirit); or else I may extend pure concepts of the understanding further than experience can reach (*e.g.* the notion of the Deity). But the *elements* of all *a priori* cognitions, even those of capricious and absurd chimeras, cannot indeed be borrowed from experience (or they would not be *a priori* cognitions), but must in every case contain the pure *a priori* conditions of possible experience, and of an object thereof; otherwise we should not only be thinking nothing by means of such chimeras, but they themselves, having no starting-point, could not even originate in thought.

Now these concepts, which contain *a priori* the pure thinking in each individual experience, we find in the Categories; and it will be a sufficient deduction of them, and a justification of their objective validity, if we prove that through them alone can an object be thought. But, as in such a thought there is more than the mere faculty of thinking—that is, the understanding—concerned; and as this faculty, considered as a cognitive faculty, which must relate to objects, will also require some explanation,

with regard to the possibility of such relation ;—we must, accordingly, first discuss the subjective sources¹ which constitute the *a priori* foundation of the possibility of experience, not according to their empirical, but according to their transcendental, nature.

If each individual representation were quite estranged from the rest, so as to be as it were isolated and separated from them, such a thing as knowledge never could come into existence ; for knowledge means a totality of compared and connected representations. If then I add to sense, because it contains multiplicity in its intuition, a synopsis, to this synopsis must correspond in every case a synthesis ; and it is only when combined with *spontaneity* that *receptivity* can make cognitions possible. This spontaneity, then, is the foundation of a threefold synthesis, which necessarily occurs in all knowledge : first, the *apprehension* of representations, as modifications of the mind in intuition ; secondly, the *reproduction* of them in the imagination ; and, thirdly, their *recognition* in the concept. These point to three subjective sources of cognition which render possible the understanding itself, and through it experience also, as an empirical product of the understanding.

PREFATORY REMARK

The deduction of the Categories is involved in such difficulties, and compels us to penetrate so deeply into the original causes and conditions of the possibility of our knowledge in general, that in order to avoid the diffuseness of a complete theory, and at the same time to omit nothing

¹ This is the aspect omitted in the Second Edition, and alluded to in the first Preface. Cf. vol. i. p. 5. M.

in so necessary an investigation, I have thought it better, in the four following paragraphs, rather to prepare than instruct the reader, and not to lay before him the systematic discussion of these elements of the understanding till the succeeding third section. I hope the reader will not permit the obscurity he at first meets to deter him, as such obscurity is unavoidable on entering upon a wholly untrodden path, but will, I hope, be perfectly removed in the section to which I have referred.

1. *Of the Synthesis of Apprehension in Intuition.*—From whatsoever source our representations arise—whether through the influence of external things, or from internal causes¹—whether they originate *a priori*, or empirically, they must nevertheless belong as phenomena (being modifications of our minds) to the internal sense; and, as such, all our cognitions must ultimately be subject to the formal condition of our internal sense—Time—as being that in which they are all ordered, connected, and brought into relation. This general remark must be above all things kept carefully in view throughout the following discussion.

Every intuition contains in itself a multiplicity, which nevertheless would not be represented as such, if the mind did not distinguish *time* in the sequence of impressions one upon another; for, so far as it is contained in a single instant, no representation could ever be anything but an absolute unity. In order, then, to make out of this manifold a unity of intuition (as, for example, in the representation of space),² it is in the first instance necessary

¹ This looks very like a suggestion of Realism in the First Edition. M.

² The reader should here notice the element omitted (for the sake of simplicity) in Kant's Aesthetic, to which he afterwards refers, *Kritik*, p. 98, note. M.

to run through the multiplicity, and then grasp it together—an action which I call *synthesis of apprehension*, as being directed immediately towards intuition, which indeed presents to us multiplicity, but which without a simultaneous synthesis cannot produce it as such, and also as contained in one representation.

Now this synthesis of apprehension must also be carried out *a priori*, that is to say, in the case of representations which are not empirical. For without it we could not have representations either of space or time *a priori*, as these can only be generated by means of the synthesis of the manifold, which [manifold] the sensibility offers in its original receptivity. We have then a pure synthesis of apprehension.

2. *Of the Synthesis of Reproduction in the Imagination.*—

It is indeed only an empirical law, according to which representations which have often accompanied or followed one another at length become associated, and so form a connexion, according to which, even in the absence of the object, one of these representations produces a transition of the mind to another, by a fixed rule. But this law of reproduction presupposes that phenomena themselves are actually subject to such a rule, and that in the multiplicity of their representations there is a concomitance or sequence, according to a fixed rule; for otherwise our empirical imagination would never find anything to do suited to its nature, and would consequently remain hidden within the depths of the mind as a torpid faculty, not even known to ourselves. Supposing vermilion were at one time red, at another black—at one time heavy, at another light; were a man changed first into one, then into another animal—were our fields covered on the longest day, at one time with corn, at another with ice and snow—then my empirical

faculty of imagination would never have had even the opportunity of thinking of the heavy vermilion, when red colour was presented to it; or again, were a certain word applied first to one thing, then to another, or the same thing, called by different names, without the control of a fixed law, to which the phenomena are already themselves subject, there could be no empirical synthesis of reproduction.

There must, then, be something which makes even the reproduction of phenomena possible, by being the *a priori* foundation of a necessary synthetical unity among them. But we very soon hit upon it when we reflect that phenomena are not things in themselves, but the mere play of our representations, which are, after all, only determinations of our internal sense. For if we can make it plain that even our purest *a priori* intuitions afford us no knowledge, except so far as they contain a combination of multiplicity only to be produced by a thoroughgoing synthesis of reproduction, then the synthesis of the imagination must also be founded *a priori* on a principle prior to all experience, and we must assume a pure transcendental synthesis of the imagination, which lies at the very foundation of even the possibility of any experience (as that which necessarily presupposes the possibility of reproducing phenomena). Now, it is plain that if I draw a line in thought, or think of the time from to-day at noon to to-morrow at the same hour, or even wish to represent to myself any definite number, first of all I must necessarily grasp in thought these manifold representations successively. But if I lost out of mind, and could not reproduce the earlier parts (the first part of the line, the prior portions of the time, or the successively represented unities), whilst I proceed to the succeeding ones, there never could arise a

complete representation, nor any of the thoughts just named—nay, not even the first and purest fundamental representations of space and time.

The synthesis of apprehension, then, is inseparably connected with that of reproduction. And as the former is the transcendental foundation of the possibility of any cognitions at all (not only of the empirical, but of the pure *a priori* also), the reproductive synthesis of the imaginative faculty is one of the transcendental operations of the mind; and, in reference to these, we shall name this faculty the transcendental imagination.¹

3. *Of the Synthesis of Recognition in the Concept.*—Without the consciousness that what we now think is identical with what we thought a moment ago, all reproductions in the series of representations would be useless. For what we now think would be a new representation at the present moment, not at all belonging to the act by which it should have been gradually produced; and the manifold thereof would never make up a totality, because it must want that unity which consciousness alone can give it. If in counting I were to forget that the units which are now pictured to my senses were added by me gradually to one another, I should not cognise the generation of quantity by the successive addition of unit to unit, nor, consequently, should I know number; for this concept consists essentially in the consciousness of the unity of the synthesis.

The very word concept might of itself lead us to this remark. For it is this *one* (single) consciousness which unites the manifold, gradually intuited, and then also reproduced into *one* representation. This consciousness, too,

¹ I use the word *imagination* throughout for the *faculty*, not for its *object*. M.

may often be weak, so that we perceive it only in the result and not in the act; that is to say, we do not join it immediately with the generating of the representation; but notwithstanding these distinctions, we must always have *one* single consciousness, even though it does not stand forth with striking clearness, and without it concepts (and consequently knowledge of objects) are quite impossible.

And here it is necessary to make it clear what we mean by the expression: object of representations. We have said above, that phenomena are nothing but sensuous representations, and these again must be considered in the very same way, viz. not to be objects (beyond the faculty of representation). What do we mean, then, when we speak of an object corresponding to cognition, and yet distinct from it? It is easy to see that this object must be thought as something in general = x , because outside our cognition we surely possess nothing which we could place over against it, as corresponding to it.

But we find that our thought of the relation of cognition to its object carries with it some sort of necessity, since the object is considered to be that which prevents our cognitions from being determined at random or capriciously, but *a priori* in some certain way, because, by being referred to an object, they must also necessarily, in relation to that object, agree among themselves; that is to say, they must have that unity which constitutes the concept of an object.

But—since we are only concerned with the manifold of our representations, and the x which corresponds to them (the object), as it must be something different from our representations, can be to us nothing—it is clear that the unity which the object necessarily produces can be nothing

else than the formal unity of consciousness in the synthesis of the multiplicity of representations. We say then: 'we cognise the object,' when we have produced in the manifold of intuition synthetical unity. But this unity would be impossible, unless we were able to produce the intuition by means of such a function of synthesis according to rule as renders necessary the reproduction of the manifold *a priori*, and also a concept in which it is united. We think, for example, of a triangle as an object, in that we are conscious of the combination of three right lines according to a rule by which such an intuition can at any time be brought before us. This unity of the rule determines all multiplicity, and limits it to conditions which make the unity of a perception possible; and the concept of this unity is the representation of object = x , which I think by means of the aforesaid predicates of a triangle.

All cognition requires a concept, however incomplete or obscure; and this, in its very form, is something universal, and serves as a rule. So the concept of body according to the unity of the manifold, which is thought by means of it, serves as a rule for our cognition of external phenomena. But it can only become a rule of intuition by representing, along with given phenomena, the necessary reproduction of their multiplicity, and conjointly the synthetical unity in the consciousness thereof. So the concept of body, when we perceive anything without us, makes the representation of extension, and with it that of solidity, figure, etc., necessary.

There is always a transcendental condition at the foundation of any necessity. Hence, we must be able to find a transcendental ground of the unity of consciousness in the synthesis of the manifold in all our intuitions, and in all our concepts of objects generally—consequently,

in all objects of experience. Without this it would be impossible to think any object as belonging to our intuitions; for such object is nothing else than that something, of which the concept expresses such a necessity of synthesis.

This original and transcendental condition is no other than Transcendental Apperception. The consciousness of self, according to the determination of our states in internal perception, is merely empirical—always changeable; there can be no fixed or permanent self in this flux of our internal phenomena; and this sort of consciousness is usually called the *internal sense*, or *empirical apperception*. That which is *necessarily* represented as numerically identical, cannot be thought as such by means of empirical data. There must be a condition, anticipating and rendering possible all experience. This condition only can render valid such a transcendental assumption.

Neither can cognitions take place in us, nor any conjunction or unity among them, without this unity of consciousness, which is prior to all the data of intuition, and by reference to which alone all representation of objects is rendered possible. This pure, original, unchangeable consciousness, I intend to call *transcendental apperception*. That it deserves this name is plain from the fact, that even the purest objective unity, namely, that of *a priori* concepts (space and time), is only possible by the reference of intuitions to such consciousness. The numerical unity, then, of this apperception is just as much the *a priori* basis of all concepts, as the multiplicity of space and time is the basis of the intuitions of sensibility.

But this very transcendental unity of apperception forms a connexion according to laws of all the possible phenomena so far as they can come together in our experience. For this unity of consciousness would be impossible

if the mind, in the cognition of the manifold, were not self-conscious of the identity of the function by means of which it connects this manifold synthetically in a cognition. Consequently, the original and necessary consciousness of the identity of self is at the same time a consciousness of just as necessary a unity of the synthesis of all phenomena according to concepts; that is, according to rules which not only make the phenomena necessarily reproducible, but *ipso facto* also determine an object for (their) intuition, and this object is a concept of something in which they are necessarily connected. For the mind could not possibly think its own identity in the multiplicity of representations, and this too *a priori*, if it had not before its eyes (so to speak) the identity of its own action, which subjects all the empirical synthesis of apprehension to a transcendental unity, and is the necessary condition of the connexion of this apprehension according to rules. We shall now be able to determine more correctly our notion of an *object*. All representations have, as such, their object, and may themselves also become the objects of other representations. Phenomena are the only objects which can be given us immediately, and that which in the phenomenon refers immediately to the object is called intuition. These phenomena are not things *per se*, but themselves only representations, which, again, have *their* object, and this we can no longer intuit; it may therefore be called the non-empirical, or transcendental object = x .

The pure concept of the transcendental object (which is really in all our cognitions of the same sort = x) is that which can obtain for all our empirical concepts in general reference to an object—that is, objective reality. Now this concept can contain no determinate intuition, and can therefore refer to nothing but that unity which must

be found in the multiplicity of a cognition, so far as it stands in relation to an object. But this relation is merely the necessary unity of consciousness, and also of the synthesis of the manifold by a general function of the mind, which connects the manifold into one representation. Since this unity must be regarded as necessary *a priori* (otherwise the cognition would have no object), the relation to a transcendental object—that is, the objective reality of our empirical knowledge—depends on the transcendental law, that all phenomena (so far as objects are to be given us through them) must submit to the *a priori* rules of their synthetical unity, according to which their relation in empirical intuition is alone possible.

In short, phenomena must in experience stand under the conditions of the necessary unity of apperception, just as they must stand in mere intuition under the formal conditions of space and time; so that only through the former does any cognition become even possible.

4. *Preliminary Explanation of the Possibility of the Categories as a priori Cognitions.*—There is only *one* experience, in which all perceptions are represented in thoroughgoing and regular connexion; just as there is only *one* space and one time in which all forms of phenomena, and all relations of existence or non-existence, are found. When we speak of different experiences, they only mean so many perceptions, as far as they belong to one and the same universal experience. The thoroughgoing and synthetical unity of perceptions is exactly what constitutes the form of experience, and experience is nothing but the synthetical unity of phenomena according to concepts. Unity of synthesis according to empirical concepts would be quite contingent; and, were these not based on a transcendental ground of unity, it would be

possible for a confused crowd of phenomena to fill our minds, without our ever forming experience from them. But then all reference of cognition to objects must vanish, because the connexion of experience according to universal and necessary laws would be wanting; we should then have thoughtless intuition, never amounting to knowledge, and so for us equivalent to nothing.

The *a priori* conditions of any possible experience are, at the same time, the conditions of the possibility of the objects of experience.¹ Now I assert that the above-mentioned *Categories* are nothing but the *conditions of thinking in possible experience*, just as *space and time are the conditions of the intuition* which is requisite for the same. The former, then, are likewise fundamental concepts which enable us to think objects in general for phenomena, and are, accordingly, objectively valid—the very point we wished to ascertain.

But the possibility, nay even the necessity, of these Categories depends upon the relation in which the whole sensibility, and with it all possible phenomena, must stand to primitive apperception; in which apperception everything must necessarily accord with the conditions of the thoroughgoing unity of self-consciousness, which means that everything must be subject to universal functions of synthesis—synthesis according to concepts. By this means alone can apperception prove its thoroughgoing and necessary identity. For example, the concept of cause is nothing but a synthesis (of that which follows in the series of time with other

¹ That is to say, the subjective conditions of our minds, whereby alone we become capable of knowing objects, must also be the only possible (and therefore necessary) conditions of objects; for without submitting to these conditions, the objects cannot exist at all. It is idle to add *for us*, since no *noumenon* can properly be called an *object*. M.

phenomena) according to concepts, and without such a unity, which has its rule *a priori* and controls the phenomena, thoroughly universal and necessary unity of consciousness could not occur in the multiplicity of phenomena: in which case these phenomena would belong to no experience, and therefore be without any object, but only a random play of representations, less even than a dream.

All attempts, then, to deduce from experience these pure concepts of the understanding, and to give them a merely empirical origin, are perfectly idle and useless. I waive the point that the concept, for example, of cause carries with it the feature of necessity, which could not be given by any experience, for this indeed teaches us, that something usually follows a certain phenomenon, but never that it must follow necessarily; nor could it teach us that we may conclude *a priori*, and quite universally, from the cause as a condition, to the effect. But this empirical rule of association, which we must of course assume as universally applicable, when we say that everything in the series of events is so strictly obedient to law, that nothing happens without being preceded by something upon which it always follows—this rule I say, as a law of nature, upon what does it depend? How, I ask, is this association even possible? The foundation of the possibility of this association of the manifold, as far as it lies in the object, is called the *affinity* of the manifold. I ask, then, what makes this thoroughgoing affinity of phenomena conceivable to you (by which they stand under, and *must* be subject to permanent laws)?

Upon my principles it is easily understood. All possible phenomena belong, as representations, to the whole of possible self-consciousness. But this being a transcendental representation, its numerical identity is indivisible

and certain *a priori*, because we cannot possibly know anything, except through this primitive apperception. Now, as this identity must necessarily be introduced into the synthesis of all the manifold of phenomena, which is ever to become empirical cognition, the phenomena must be subject to *a priori* conditions, to which their synthesis (in apprehension) must thoroughly conform. The representation of a general condition, according to which a certain multiplicity *can* be brought before us (that is to say, a definite way of doing it), is called *Rule*; if it *must* be so brought before us, *Law*. Consequently all phenomena stand in thorough connexion with one another according to necessary laws, and hence in a *transcendental affinity*, of which the *empirical* is merely the consequence.

That nature must conform to our subjective apperception—nay, even that its order must depend on this relation—probably sounds very absurd and strange. But if we reflect that this nature is nothing in itself but the sum-total of phenomena, consequently nothing *per se*, but merely a number of mental representations, we need not be surprised that we see it subject to the radical faculty of all our *knowledge*; that is to say, subject to transcendental apperception, and hence subject to that unity through which alone it can become the object of any possible experience; or, in other words, become nature. It is for the very same reason that we can cognise this unity *a priori*, and therefore necessarily, which would be impossible were it given *in itself*, independent of the highest sources of our thinking. In this latter case, I know not whence we could draw the synthetical propositions of such a universal unity of nature; for then we must borrow them from the objects of nature themselves. As this could only be done empirically, nothing could be inferred but a contingent unity, which

is very far from being the necessary connexion which we mean by the word nature.

§ 3. *Of the Relation of the Understanding to Objects in general, and of the Possibility of Cognising them a priori.*

The detached observations made in the previous section we shall here unite and present in a connected form. There are three subjective sources of cognition, upon which rest the possibility of experience in general, and the cognition of objects ; these are *Sense*, *Imagination*, and *Apperception*. Each of these can be considered empirically, that is, in its application to given phenomena ; but all of them are also [original] elements [of the mind], and *a priori* conditions, which make even this empirical use possible. *Sense* represents phenomena empirically in *perception* ; *Imagination*, in *association* (and reproduction) ; *Apperception*, in the *empirical consciousness* of the identity of these reproduced representations with the (original) phenomena, that is to say, in *Recognition*. But at the *a priori* basis of the whole of our perceptions lie pure intuitions (or if we regard them as representations—the form of internal intuitions, time). At the basis of association lies the pure synthesis of the imagination ; and at the basis of empirical consciousness, pure apperception, that is, the thoroughgoing identity of self in all possible representations. If we wish, then, to analyse the internal causes of this connexion of representations, till we reach the point where all representations must meet (in order to start with unity of cognition, which is the necessary condition of possible experience), we must begin from pure apperception. All intuitions are for us nothing, and do not the least concern us, if they cannot be taken up into consciousness, whether directly or indirectly, and only

through this means is cognition at all possible. We are *a priori* conscious of our own complete identity in regard to all representations which can ever belong to our cognition; and this we regard as the necessary condition of the possibility of all representations. (For these only represent anything in me, by belonging, with all the rest, to one consciousness, in which they *can* at any rate be connected.) This principle is established *a priori*, and may be called the *transcendental principle of the unity* of all multiplicity in our representations (even in intuition). Now, the unity of multiplicity in one subject is synthetical. Pure apperception, then, gives us a principle of the synthetical unity of multiplicity in all possible intuition.¹

But this synthetical unity presupposes or implies a

¹ Let us pay particular attention to this proposition, which is of the greatest importance. All representations have a necessary reference to a possible empirical consciousness; for if they had not this feature, and were it quite impossible to become conscious of them, this would mean that they do not exist. But all empirical consciousness has a necessary reference to a transcendental consciousness (preceding all particular experience), namely, the consciousness of self, as the primitive apperception. It is absolutely necessary that in my cognition all [acts of] consciousness should belong to one consciousness (of myself). Now this is a synthetical unity of the manifold (of consciousness) which is cognised *a priori*, and which gives just the same basis for synthetical *a priori* propositions that relate to pure thinking, as space and time give to such propositions as relate to the form of mere intuition. The synthetical proposition, that the various empirical consciousnesses must be combined in one single self-consciousness, is absolutely the first and synthetical principle of our thinking in general. But we must never forget, that the bare representation *Ego* is the transcendental consciousness in relation to all others (the collective unity of which it renders possible). This representation may then be clear (empirical consciousness) or obscure—a fact which is here of no importance; nay, not even the fact whether it have any actuality or not; but the possibility of the logical form of all knowledge rests necessarily on the relation to this apperception *as a faculty*.

synthesis; and if the former is to be necessary *a priori*, the latter must be an *a priori* synthesis. Consequently, the transcendental unity of apperception points to the pure synthesis of imagination, as an *a priori* condition of the possibility of any combination of the manifold into a single cognition. But it is only the *productive synthesis of the imagination* which can take place *a priori*; for the *reproductive* depends on empirical conditions. Consequently, before apperception, the principle of the necessary unity of the pure (productive) synthesis of the imagination is the foundation of the possibility of any knowledge, especially of experience.

We denominate the synthesis of multiplicity in the imagination transcendental, when, without distinguishing the intuitions, it aims at nothing but the combination of multiplicity *a priori*: and the unity of this synthesis is called transcendental, if, as referring to the original unity of apperception, it is represented as necessary *a priori*. Now, as this latter lies at the foundation of all cognitions, the transcendental unity of the synthesis of the imagination is the pure form of all possible cognition, by means of which all objects of possible experience must be represented *a priori*.

The unity of apperception in relation to the synthesis of the imagination is the *understanding*; and this very unity, in relation to the *transcendental* synthesis of the imagination, is the *pure* understanding. There are, then, in the understanding pure cognitions *a priori* which contain the necessary unity of the pure synthesis of the imagination, in reference to all possible phenomena. But these are the Categories, or pure concepts of the understanding. Consequently, the empirical faculty of cognition which belongs to our nature contains an understanding which

relates to all objects of the senses, but this only mediately, through intuition and its synthesis by means of the imagination, to which understanding all phenomena must consequently be subject, as data for a possible experience. But, as this relation of phenomena to possible experience is also necessary (because without this they would afford us no cognition, and not concern us at all), it follows, that the pure understanding, by means of the Categories, is a formal and synthetical principle of all experiences, and phenomena have a *necessary relation to the understanding*.

We shall now expound the necessary connexion of the understanding with phenomena by means of the Categories, by beginning from below—from the empirical extremity. The first thing given us is the phenomenon, which, if combined with consciousness, is called perception. (Without relation at least to a possible consciousness, the phenomenon could never be for us an object of cognition, and would hence be to us as nothing; having no objective reality, and only existing as known, it would be absolutely nothing at all.) But as every phenomenon contains a certain multiplicity—that is to say, as various perceptions are found within us, in themselves scattered and single—a connexion of them is necessary, and this they cannot have in mere sense. There is, then, within us an active faculty of the synthesis of this multiplicity, which we call the faculty of Imagination; and the action of which, when directed immediately upon the perceptions, I call apprehension.¹ The province of the imagination is to unite the

¹ That the faculty of imagination is a necessary ingredient even in perception, has perhaps not as yet struck any psychologist. This arises partly from confining the faculty to mere reproductions; partly because it was thought that the senses not only gave us impressions,

manifold of intuition into an *image*; it must first, then, grasp the impressions actively, viz. *apprehend* them.

But it is clear that even this apprehension of the manifold by itself could produce no image, nor connexion of impressions, if there were not present a subjective condition for summoning a perception from which the mind had made a transition to the next, to join this next, and so produce whole series of these perceptions—in fact, if we did not possess a reproductive faculty of the imagination, which even then is only empirical. But representations, if they suggested one another just as they chanced to meet together originally, would have no determinate connexion, but be a mere confused crowd, from which could spring no cognition; their reproduction must therefore have a rule by which a representation enters into combination rather with this than with another representation in the imagination. The subjective and empirical ground of reproduction according to rules, we call the *association* of representations.

But if this unity of association had not also an objective basis, so as to make it impossible for phenomena to be apprehended by the imagination except under the condition of a possible synthetical unity of this apprehension, then it would also be quite contingent that phenomena, when combined, should be adapted to human cognitions. For although we had the faculty of associating perceptions, it would still be quite undetermined in itself, and accidental, whether they were also themselves capable of such association; and supposing they were not, a quantity of

but even combined them, and so brought images of objects before us—a process which, nevertheless, most certainly requires somewhat besides the mere receptivity of impressions, namely, a function of their synthesis.

perceptions, and even a whole sensibility, would be possible, in which the mind might meet with a great deal of empirical consciousness, but disconnected, and without belonging to one *consciousness of myself*, which is nevertheless impossible. For it is only when I attribute all my perceptions to one consciousness (of pure apperception) that I can say I am conscious of them. There must, then, be an objective ground prior to any of the empirical laws of imagination, and *a priori*, on which depends the possibility—nay, even the necessity—of a law extending over all phenomena ; which regards them universally to be such data of the senses as are in themselves associable, and subject to the general rules of a thoroughgoing connexion when reproduced. This objective basis of all association of representations I call *affinity*. We cannot meet it elsewhere than in the principle of the unity of apperception, as regards all cognitions which can belong to me. According to this principle, every phenomenon without exception must so enter the mind, or be apprehended, as to agree with the unity of apperception, which apperception would itself be impossible without synthetical unity in its connexion ; this latter is, accordingly, also objectively necessary.

The objective unity of all (empirical) consciousness in one consciousness (of primitive apperception) is then the necessary condition even of all possible perception ; and the affinity of all phenomena (proximate or remote) is the necessary consequence of a synthesis in the imagination, which is founded *a priori* upon rules.

The Imagination is then also a faculty of *a priori* synthesis, for which reason we give it the name of the productive imagination ; and since, as far as it relates to the multiplicity of phenomena, it has no further object

than to produce the necessary unity in their synthesis, we may call it the transcendental function of the imagination. It is then sufficiently clear from what precedes, though it may sound rather strange, that only by means of the transcendental function of the imagination does even the affinity of phenomena, and with it their association, and through this, too, their reproduction in accordance with laws—in fact, does experience—become possible ; because without it no concepts of objects would ever coalesce into one experience.

For the fixed and unchanging *Ego* (of pure apperception) constitutes the correlatum of all our representations, so far as it is merely possible to become conscious of them ; and all consciousness belongs just as much to an all-comprehensive pure apperception as all sensuous intuition (*qua* representation) belongs to a pure internal intuition—namely, that of time. It is, then, this apperception which must be added to the imagination, to render its function intellectual. For in itself the synthesis of imagination, though exercised *a priori*, is yet always sensuous, because it only combines the manifold as it appears in intuition—for example, the figure of a triangle. But it is only through the relation of the manifold to the unity of apperception that concepts can be formed, and this only by means of the imagination in relation to the sensuous intuition.

We have then the pure imagination, as an original faculty of the human soul, lying at the basis of all cognition *a priori*. By means of it we bring on the one side the multiplicity of intuition, and on the other the condition of the necessary unity of apperception, into mutual relation.¹

¹ From this point I have developed my explanation of the schematism of the Categories. M.

Both extremities—sensibility and understanding—must be necessarily connected by means of this transcendental function of the imagination ; otherwise, there might indeed be appearances, but no objects of empirical cognition, or experience. Actual experience, consisting of apprehension, association (of reproduction), and finally, of the recognition of phenomena, contains in this last and highest (merely empirical element of experience) concepts, which render possible the formal unity of experience, and with it all objective validity (truth) of empirical cognition. These fundamental causes of the recognition of multiplicity, so far as they concern merely the *form of experience in general*, are the very categories of which we are speaking. On them is founded not only all formal unity of the synthesis of the imagination, but through it the unity even of all that belongs to its empirical use (in recognition, reproduction, association, apprehension) down to phenomena ; because it is only by means of these elements of our knowledge that phenomena can belong to our consciousness, and hence to ourselves.

Thus the order and regularity in phenomena, which we call *nature*, we ourselves introduce, and should never find it there, if we, or the nature of our mind, had not originally placed it there. For this unity of nature must be a necessary unity of connexion, that is to say, certain *a priori*. But how could we possibly produce *a priori* a synthetical unity, if subjective foundations for such unity *a priori* were not contained in the original sources of knowledge in our mind, and if these subjective conditions were not at the same time objectively valid, by being the very basis of the possibility of cognising any object at all in experience ?

We have already explained the *Understanding* in various ways : by a spontaneity of cognition (as opposed to the

receptivity of sensibility), or by a faculty of thinking, or of concepts, or even of judgments—all of which explanations, if properly understood, coincide. We may now characterise it as the *faculty of rules*. This attribute is more fruitful, and explains its¹ nature better. Sensibility gives us forms (of intuition), but the understanding gives us rules. This latter is always occupied in hunting through phenomena, in order to find any rule they may present. Rules, so far as they are objective (or belong necessarily to the cognition of the object) are called laws. Although we learn many laws from experience, yet are these only particular determinations of higher laws, among which the highest (to which the rest are subordinate) are derived from the Understanding itself, and are not borrowed from experience, but rather render phenomena subject to law, and by this very means make experience itself possible. The understanding is, then, not merely a faculty of forming for itself rules by the comparison of phenomena; it is itself a code of laws for nature, that is to say, without the understanding there would be no nature at all, or synthetical unity of phenomena according to rules; for phenomena cannot, as such, find place without us, but exist only in our sensibility. But this [sensibility], as an object of knowledge in experience, with all that it may contain, is only possible in the unity of apperception. This unity of apperception is the transcendental basis of the necessary regularity of all phenomena in experience. The same unity in relation to the multiplicity of representations (that is to say, determining it from a single representation) is the rule, and the faculty of these rules is the understanding. Thus all phenomena, as possible objects of experience, lie *a priori* in the understanding, and receive from it their

¹ Reading *desselben* rather than *derselben*. M.

possibility, just as mere intuitions lie in the sensibility, and, as to form, are only possible through it.

However exaggerated or absurd, then, it may seem to assert that the understanding itself is the source of the laws of nature, and of the formal unity thereof, such an assertion is nevertheless equally correct and applicable to the object, that is, to experience. Empirical laws, indeed, as such, can by no means deduce their origin from the pure understanding, just as the infinite variety of phenomena could not be adequately conceived from the pure form of sensuous intuition. But all empirical laws are only particular determinations of the pure laws of the understanding, under which, and according to the type of which, they first become possible; so that phenomena assume a fixed form, just as all phenomena, in spite of the variety of their empirical form, must nevertheless always accord with the conditions of the pure form of sensibility.

The pure understanding is, then, in the Categories, the law of the synthetical unity of all phenomena; and hence it first renders experience possible as to form.¹ But this was our whole aim throughout the transcendental deduction of the Categories, namely, this relation of the understanding to sensibility, and through it to all objects of experience; in fact, to render intelligible the objective validity of the pure concepts of the understanding, and so to establish their origin and truth.

¹ This important limitation saves Kant's system from absolute idealism. He never asserts that the matter of experience is created by the *Ego*. M.

SUMMARY STATEMENT OF THE CORRECTNESS AND POSSIBILITY OF THIS AND NO OTHER DEDUCTION OF THE PURE CONCEPTS OF THE UNDERSTANDING.

WERE the objects with which our knowledge is concerned things in themselves, we could not have any *a priori* concepts of them. For from whence could we obtain such concepts? Suppose we took them from the object (without pausing to investigate how this could become known to us at all), then our concepts would be merely empirical, and not *a priori*. Suppose we took them from ourselves, then that which is merely within us could not determine the nature of an object distinct from our representations; that is to say, it could not form a reason why there should exist a thing to which our thoughts should correspond, rather than that such representations should be totally void. On the contrary, if we are altogether concerned only with phenomena, it is not only possible, but even necessary, that certain *a priori* concepts should antecede the empirical cognition of objects. For, as phenomena, they produce an object which exists only in us, because a mere modification of our sensibility cannot exist without us. Now this very representation—that all these phenomena, and objects with which we can employ ourselves, are all in me, that is, are determinations of my identical self—this representation, I say, expresses their complete unity in one and the same apperception to be necessary. But in this unity of possible consciousness consists also the form of all cognition of objects (by which multiplicity is thought as belonging to *one* object). So that the way in which the manifold of sensuous representations (intuition) belongs to one consciousness, precedes all cognition of the object, as being its intellectual form, and even produces a formal cognition of

all objects *a priori*, so far as they are thought (Categories). Their synthesis through the pure imagination, and the unity of all representations in relation to primitive apperception, precede all empirical cognition. Consequently, all pure concepts of the understanding are only for this reason possible—nay, even in relation to experience, necessary—that our knowledge is concerned with nothing but phenomena, the possibility of which lies within ourselves, and the conjunction and unity of which (in the representation of an object) are to be found only in ourselves; so that these must precede all experience, and make it even possible as to form. It is then on this, the only possible basis, that our deduction of the Categories has been constructed.

APPENDIX B

DISTINCTION BETWEEN NOUMENA AND PHENOMENA

(a.) AFTER the words ‘under such conceptions,’ p. 181 (Meiklejohn’s translation), the following paragraph occurs in the First Edition :—

‘Above, in the exposition of the table of the Categories, we saved ourselves the trouble of defining each of them, because our object, which concerned merely their synthetical use, did not require it, and we should not, by needless undertakings, incur responsibilities which we can avoid. This was not an evasion, but an unavoidable rule of prudence, not to venture forthwith into definitions, and to attempt or pretend to completeness in the determination of a concept, when one or two of its attributes suffice, without our requiring a complete enumeration of all that make up the whole concept. But it now appears that the ground of this precaution lies deeper, namely, that we could not define them if we wished to do so.¹ For, if we

¹ I mean here real definition, which does not merely substitute for the name of a thing other more intelligible terms, but that which contains in it a distinct attribute by which the object (*definitum*) can always be certainly recognised, and which renders the defined concept useful in application. The real explanation would then be that which

get rid of all the conditions of sensibility which mark them as concepts that can possibly be used empirically, and take them for concepts of things in general (that is, of transcendental application), then nothing further can be done with them than to regard the logical function in judgments as the condition of the possibility of things themselves; without there being the least evidence how they could then have their application and object, or how they could then have any meaning and objective validity in the pure understanding, apart from sensibility.'

(β .) Instead of the note on p. 182, the First Edition has the following:—

'It appears somewhat strange, and even absurd, that there should be a concept which is to have a signification, but is not capable of any explanation. But the Categories are here so peculiarly circumstanced that, though they can only have a definite signification and reference to any object by means of the universal *sensuous condition*, yet this condition has been left out of the pure Category, which in consequence can contain nothing but the logical function of bringing the manifold under a concept. But from this function—that is, from the form of the concept alone—it cannot at all be known what object falls under it, because abstraction has been made from that very sensuous condition, owing to which alone objects in general can come under the Category. Hence the Categories require, beyond the mere concept of the understanding, determinations of their application to sensibility in general (*schemata*), and without this are not concepts by which any object can be cognised and distinguished from another: they are rather

makes distinct not only a concept, but at the same time its *objective reality*. Mathematical explanations, which present the object in accordance with the concept in intuition, are of this latter sort.

so many ways of thinking an object for possible intuitions, and giving it its signification (under conditions yet to be supplied), according to some function of the understanding, that is, of *defining* it: but these Categories cannot themselves be defined. The logical functions of judgments in general—unity and plurality, affirmation and negation, subject and predicate—cannot be defined without arguing in a circle, because such definition cannot but be a judgment, and must therefore contain these functions. But the pure Categories are representations of things in general, so far as the diversity of their intuition must be thought through one or other of these logical functions: Quantity is the determination which can only be thought through a judgment having quantity (*judicium commune*); Reality, that which can only be thought through an affirmative judgment; Substance, that which, in reference to intuition, must be the ultimate subject of all other determinations. But what sort of things they are, in reference to which we must employ this function rather than that, still remains quite undetermined. So that the Categories, without the condition of sensuous intuition (provided they contain the synthesis), have no definite relation to any object, hence cannot define any such object, and have not, consequently, in themselves the validity of objective concepts.'

'The passage commencing 'but there lurks' (p. 184), and ending '*negative* sense' (p. 186), was re-written in the Second Edition. Its original form was as follows:—

Appearances, so far as they are thought as objects, according to the unity of the Categories, are called *phenomena*. But if I assume things, which are merely the objects of the understanding, and which can, at the same time, be presented to an intuition, though not a sensuous one (as

coram intuitu intellectuali), then such things would be called *noumena* (*intelligibilia*).

Now it might be imagined that the concept of phenomena, limited as it was in the transcendental Aesthetic, suggests of itself the objective reality of the *noumena*, and justifies the division of all objects into phenomena and noumena ; and so of the world into one of sense and reason (*mundus sensibilis et intelligibilis*). And indeed the difference would not seem to be the logical form of the distinct or indistinct knowledge of one and the same object, but would start from the difference of the way in which they are given to our cognition, and according to which they must differ from one another in themselves generically. For if the senses represent something only as it appears, this something must surely be also a thing in itself, and the object of a non-sensuous intuition, that is, of the understanding. In such case there must be a cognition possible, in which no sensibility can be found, and which alone possesses absolutely objective reality, viz. by which objects are represented to us *as they are* ; whereas, on the contrary, in the empirical use of our understanding, things are only cognised *as they appear*. Accordingly, beyond the empirical use of the Categories (which is restricted to sensuous conditions), there would be still a pure and objectively valid one ; and we could not assert, as we have claimed to do so far, that our pure understanding-cognitions are nothing but principles of the exposition of appearance, and do not reach any further *a priori* than the formal possibility of experience ; for here quite another field would lie open to us, as it were a world thought in the spirit (perhaps even intuited), upon which we could employ our understanding just as much, and far more nobly.

Now all our representations are, in fact, referred to some

object by the understanding, as phenomena are nothing but representation; and so the understanding refers them to *something*, as the object of sensuous intuition; but this something is so far merely the transcendental object. But this signifies a something = x , of which we know nothing; nor can we (according to the present constitution of our understanding) know anything of it, as being that which can serve only as a correlate of the unity of apperception to obtain the unity of diversity in sensuous intuition, by means of which the understanding unites this diversity in the concept of an object. This transcendental object cannot be at all separated from the sensuous data, because then nothing remains by which it would be thought.¹ [This x then] is no object of cognition in itself, but only the representation of phenomena under the concept of an object in general, which is determinable by the diversity of the phenomena.

For this reason, the Categories do not represent any definite object given to the understanding alone, but only serve to determine the transcendental object (the concept of something in general), by what is given in sensibility, so as by it to cognise empirically phenomena under concepts of objects.

But as to the reason why we (not satisfied with the *substratum* of sensibility) have added noumena to the

¹ This clause Kuno Fischer omits in his account of the matter (*Comm.* p. 131), though it explains and limits Kant's meaning, in the passages quoted by him (pp. 190 and 195) in italics. Because nothing is left *for us*, when we subtract all the subjective conditions of the object, it does not follow that nothing *at all* remains. Hence, throughout this passage Kant never asserts the thing *per se* not to exist. His private opinion seems to have been that it did exist; and this is often *implied* in his language, though not dogmatically stated, being just as indemonstrable as the opposed doctrine. M.

phenomena, which the pure understanding alone can think, it rests simply upon this: Sensibility and its sphere (viz. that of phenomena) are restricted by the understanding to this, that they shall concern not things *per se*, but only the way in which things appear to us according to our subjective constitution. This was the result of the whole transcendental Aesthetic; and it also follows naturally from the very concept of a phenomenon in general, that something must correspond to it which in itself is not phenomenon, because phenomenon can be nothing in itself beyond our faculty of representation; so that, unless we are involved in a perpetual circle, the very word phenomenon indicates a reference to something, the immediate representation of which indeed is sensuous, but which in itself, even without this constitution of our sensibility (upon which the form of our intuition is based), must still be something, that is, an object independent of our sensibility.

Now from this originates the concept of a noumenon, which is, however, not at all positive, or a definite cognition of any particular thing, but only signifies the thought of something in general, by abstracting from all the form of sensuous intuition. But in order that a noumenon should signify a true object, to be distinguished from all phenomena, it is not enough for me to rid my thoughts of all the conditions of sensuous intuition; I must, over and above this, have some reason for assuming another sort of intuition than sensuous, to which such an object could be given: otherwise my thought, though not self-contradictory, is still void. We have, indeed, not been able to demonstrate in the text that sensuous intuition was the only possible one whatever, but merely that it was so *for us*; but neither were we able to prove that any other kind of intuition was possible; and although our thought can abstract from all

sensibility, the question still remains to be settled—whether it is then anything but the mere form of a concept; and whether, when such abstraction is made, any object at all is left.¹

The object to which I refer the phenomenon in general is the transcendental object, that is, the totally undetermined thought of *something* in general. This cannot be called the *noumenon*; for I do not know what it is in itself, and have no concept of it at all, except as the object of sensuous intuition in general, which is, accordingly, of the same description for all phenomena. I cannot think it by means of any Category; for such is valid only of empirical intuition, in order to subject it to the concept of an object in general. A pure use of the Categories is indeed possible, or not contradictory, but has no objective validity, because it concerns no intuition on which it confers the unity of an object; for the Category is only a pure function of thought, by which no object can be given me, but by which I only think what is given in intuition.

¹ Here is the question of absolute idealism explicitly raised; and the following paragraph proceeds, not to solve it dogmatically, but merely to show that no possible data can be found for settling the question. There being such total absence of proofs, may not the necessary suggestion of noumena by phenomena be allowed some weight? M.

APPENDIX C

THE FIRST PARALOGISM OF SUBSTANTIALITY¹

THAT of which the representation is the absolute subject of our judgments, and which consequently cannot be used to determine anything else [as predicate], is *substance*.

I, as a thinking being, am the *absolute* subject of all my possible judgments, and this representation of myself cannot be used as the predicate of anything else.

Therefore I, as a thinking being (soul), am *substance*.

KRITIK OF THE FIRST PARALOGISM OF PURE PSYCHOLOGY

We have shown in the analytical part of the transcendental Logic that pure Categories (and among them that of Substance) have in themselves no objective meaning at all, except when based on an intuition, to the diversity of which they can be applied, as functions of the synthetical unity. Without this, they are merely functions of judgment, without content. Of anything in general, I may say it is substance, so far as I distinguish it from the mere predicates and determinations of things. Now in all our thinking, the

¹ The following discussion stood in the First Edition after the words 'predicaments of pure psychology' (p. 241).

Ego is the subject, in which thoughts inhere merely as determinations, and this *Ego* cannot be used to determine anything else. Consequently, every one must necessarily consider himself as the substance, and his thoughts as the accidents, of his existence, and determinations of his condition. But what use can I make of this notion of a substance? That I, as a thinking being, exist permanently; that I cannot naturally either originate or pass away—this I cannot at all infer from it, and yet it is the only use of the concept of the substantiality of my thinking subject, with which I could otherwise very well dispense.

We are so far from being able to conclude these properties from the mere pure Category of substance, that we are obliged to start from the permanence of an object derived from experience, if we wish to bring such an object under the empirically applicable concept of *substance*. Now, in the proposition we are discussing, we have not taken any experience for our basis, but have drawn our conclusion simply from the concept of the relation which all thought has to the *Ego*, in which it inheres, as its common subject. Neither could we, supposing we desired to do it, establish such a permanence by any safe observation. For the *Ego* is present indeed in all thoughts; but there is not the least intuition connected with this representation, to distinguish it from other objects of intuition. We may then indeed perceive that this representation is ever recurring in every act of thought, but not that it is the fixed and permanent intuition in which thoughts (being transient) alternate.¹

It follows, that the first syllogism of transcendental

¹ He here approaches as closely as possible to the refutation of idealism in his Second Edition. According to the First Edition also, all change must take place in a permanent [and (Second Edition) a

psychology only palms off upon us a pretended discovery, by setting up the constant logical subject of thinking as the cognition of the real subject of inherence. Of this latter we neither have, nor can have, the least knowledge, because consciousness is the only thing which makes all our representations thoughts, and wherein all our perceptions must be found, as their transcendental subject ; and beyond this logical meaning of the *Ego*, we have no knowledge of the subject in itself, which lies as *substratum* at the basis of this [representation of self], as well as of all other thoughts. The proposition, then, *the soul is a substance*, may be allowed to stand, provided we keep in mind that this notion leads us no further, and cannot teach us any of the usual conclusions of sophistical psychology ; for example, its permanence through all changes, and even after death. It denotes then a substance only in Idea, but not in reality.

THE SECOND PARALOGISM, OF SIMPLICITY

A thing, of which the action cannot be regarded as the concurrence of the action of several things, is *simple*.

Now the soul, or thinking *Ego*, is such a thing.

Therefore, etc.

KRITIK OF THE SECOND PARALOGISM OF TRANSCENDENTAL PSYCHOLOGY

This is the Achilles of all the dialectical syllogisms of pure psychology ; not merely a play of sophistry ingeniously contrived by the dogmatical philosopher, to produce some

permanent homogeneous with it]. This permanent is not the *Ego* [(First Edition, above;)] therefore, it must be an external permanent (Second Edition). M.

show of argument for his assertions, but a conclusion which seems to withstand the most acute investigation, and the most circumspect consideration. Here it is:—

Every *composite* substance is an aggregate of many; and the action of any composite, or that which inheres in it as such, is the aggregate of many actions or accidents, divided among a number of substances. Now, an effect which arises from the concurrence of several acting substances is possible when this effect is merely external (as, for instance, the motion of a body is the joint motion of all its parts). But the case is different with thoughts, which are accidents belonging internally to a thinking being. For supposing that this composite did think, each part of it would contain part of the thought; but all of them only when combined, the whole thought. Now this is contradictory. For since the representations which are contained under the different parts (suppose the individual words of a verse) are never [by themselves] a whole thought (a verse), so thought cannot be inherent in a composite as such. Thought, therefore, is only possible in a substance which is not an aggregate of many substances, but absolutely simple.¹

The so-called *nervus probandi* of this argument lies in the proposition: that many representations must be contained in the absolute unity of the thinking subject, to make up one thought. But this proposition no one can prove *from concepts*. For how could he even commence his argument? The proposition: a thought can only be the effect of the absolute unity of the thinking being—cannot be treated analytically. For the unity of a thought

¹ It is very easy to give this proof in the usual scholastic form. But it is sufficient for my purpose to present its ground of proof though merely in a popular form.

which consists of many representations is collective, and, as far as pure concepts go, might just as well refer to the collective unity of the co-operating substances (like the motion of the body being the composite motion of its parts), as to the absolute unity of the subject. Proceeding then according to the rule of identity, we cannot see the necessity of presupposing a simple substance to account for a composite thought. But that this proposition should be recognised synthetically and perfectly *a priori* from pure concepts, no one will venture to assert, who understands the basis of the possibility of synthetical *a priori* judgments, as already set forth.

Now it is equally impossible to deduce from experience this necessary unity of the subject, as the condition of the possibility of each single thought. For experience could give no necessity, and besides the concept of absolute unity is far beyond its sphere. Whence then do we get this proposition, on which the whole psychological syllogism rests?

It is plain that, if we wish to represent a thinking being, we must put ourselves in its place, and so supply our own subject to the object which we wish to obtain (which is not the case in any other sort of investigation), and that we only demand the absolute unity of the subject, because otherwise we could not say: I think (the manifold of the representation). For, although the sum of the thought might be divided and distributed among many subjects, yet the subjective *Ego* cannot be divided or distributed, and this we certainly presuppose in all thinking.

Here, then, as in the previous paralogism, the formal proposition of apperception, *I think*, is also the whole basis upon which rational psychology ventures to extend her cognitions — a proposition which is not experience, but

merely the form of apperception, belonging to, and preceding, every experience. But with reference to possible cognition, this must be regarded merely as a *subjective condition*, which we have no right to exalt to a condition of the possibility of objects, that is, to a *concept* of a thinking being in general [merely], because we cannot represent such a being to ourselves, without putting ourselves with the formula of our consciousness in the place of every other intelligent being.

The simplicity of myself (as a soul) is not actually inferred from the proposition, I think; for it already exists in every thought. The proposition, *I am simple*, must be regarded as an immediate expression of apperception, just as the supposed Cartesian conclusion, *cogito ergo sum*, is really tautological, as *cogito* (= *sum cogitans*) expressly asserts existence. *I am [a] simple [being]* means nothing but this—that the representation *I* does not contain the least multiplicity, and that it is an absolute (although merely logical) unity.

Consequently, this celebrated psychological demonstration is merely based upon the indivisible *unity* of a representation which only directs the verb [*cogitare*] to refer to a person. But it is plain that the subject of inherence is only indicated as transcendental by the *Ego* attached to the thought, without noting in the least any of its properties, and without knowing or cognising anything at all about it. It means something in general (a transcendental subject), the representation of which must indeed be simple, for the obvious reason that nothing at all is determined in it, since we cannot represent a thing more simply than by the notion of a mere something. But the fact of the simplicity of the representation of a subject is not, for that reason, a cognition of the simplicity of the subject itself; total

abstraction being made from its properties, when it is merely indicated by the perfectly contentless expression *Ego* (which I can apply to every thinking subject).

So much is certain, that I represent to myself by *Ego* always an absolute, though only a logical, unity of the subject (Simplicity), but do not cognise through it the actual simplicity of my subject. As the proposition, I am substance, means nothing but the pure Category, of which I can make no concrete use (empirically), so I may also be allowed to say, I am a simple substance, that is, one whose representation never contains a synthesis of multiplicity; but this concept, or even this proposition, does not give us the least information with regard to myself as an object of experience, because the concept of substance itself is only used as a function of synthesis, without being based on intuition, that is, without any object; so that it only applies to the condition of our knowledge, not to any object which we could name. Let us make an experiment with regard to the supposed use of this proposition.

Every one must confess that the assertion of the simple nature of the soul is merely of value so far as I am able by it to separate this subject from all matter, and consequently exempt it from decay, to which matter is always liable. It is for this use that the above proposition is specially intended, and it is therefore often thus expressed: The soul is not corporeal. Now if I can show that, even conceding to this cardinal proposition of rational psychology all objective validity (that all which thinks is simple substance), in the pure meaning of a mere judgment of the Reason (from pure Categories)—even conceding this, I say—not the least use can be made of it with reference to its dissimilarity or relation to matter, then I may fairly claim

to have relegated this pretended philosophical truth into the region of pure Ideas, which are wanting in reality when objectively used.

We have proved irrefragably in our transcendental Aesthetic that bodies are mere phenomena of our external sense, and not things in themselves. In accordance with this we may say justly, that our thinking subject is not corporeal, viz. that as it is represented to us as an object of the internal sense, it cannot, so far as it thinks, be an object of the external senses, or a phenomenon in space. This is equivalent to saying : Thinking beings, as such, can never be represented to us among external intuitions ; or, we cannot intuit their thoughts, consciousness, desires, etc., externally ; for all these must come before the internal sense. This argument indeed appears to be also the natural and popular one, which seems to have satisfied even the most ordinary understandings, so that from very early times they began to consider souls as totally distinct from bodies.

Now extension, incompressibility, connexion, and motion—in short, all that our external senses only can give us—are not, and indeed do not contain, thought, feeling, desire, or resolve, which are not at all objects of external intuition. Nevertheless, *that* something which lies at the basis of external phenomena—which so affects our sense as to give it the representations of space, matter, form, etc.—that something, I say, considered as a noumenon (or perhaps better as a transcendental object), might also at the same time be the subject of thoughts, although we may not be able to obtain any intuition of mental states (but only of space and its determinations), through the means by which our external sense is affected. But this something is not extended, impenetrable, or composite, because all these

predicates only concern sensibility and its intuition, so far as we are affected by that sort of objects (otherwise unknown to us). Yet these expressions by no means declare to us what sort of an object it is, but only this, that the predicates of external phenomena cannot be applied to it, considered as an object in itself, and without reference to external senses. But the predicates of the internal sense—representation and thinking—do not contradict it. Consequently, even admitting the simplicity of its nature, the human soul is not at all proved to be distinct from matter, as regards their respective *substrata*, when considered (as it should be) merely as a phenomenon.

If matter were a thing *per se*, it would, as a composite being, be altogether different from the soul, as a simple being. But it is only an external phenomenon, of which the *substratum* is not cognised by any producible predicates. I might, then, be quite justified in assuming of this *substratum* that it was in itself simple, although in the way which it affects our senses it produces in us the intuition of extension, and, along with it, of composition. It might follow that this substance, to which extension is added by reference to our external sense, is accompanied by thoughts in itself, which through its own peculiar internal sense can be represented with consciousness. In this way the very same thing which in one relation is called corporeal, is at the same time in another called a thinking being, whose thoughts indeed we cannot intuit, but only their evidences, in phenomena. We should thus get rid of the expression, that souls only (as being a peculiar sort of substances) think; we should rather use the ordinary phrase, that men think; that is to say, that the very same thing which is extended as an external phenomenon, is

internally (in itself) a subject not composite, but simple and thinking.

But, without admitting such hypotheses, we may observe in general, that if I mean by soul a thinking being *per se*, the very question is improper, if we mean to ask whether it is of the same kind, or not, as matter (which is not a thing *per se*, but only a sort of representation in us); for it is self-evident that a thing *per se* must be of a different nature from the determinations which merely constitute its states.¹

But, if we compare the thinking *Ego*, not with matter, but with the intelligible something at the basis of the external phenomena, which we call matter, as we know nothing of this latter, we cannot assert that the soul differs from it in any way internally.²

Accordingly, simple consciousness is not a cognition of the simple nature of our subject, so far as it is to be distinguished as such from matter as a composite existence.

But if this concept of simplicity is useless in the only case where it could be of service (that is, to determine the peculiar and distinguishing feature of our subject, when I compare myself with the objects of external experience), we may fairly despair of ever knowing that *I*, the soul (a name for the transcendental object of the internal sense), am simple. This expression has no application extending

¹ Cf. Fischer's *Commentary*, p. 56, note.

² The tone of the whole preceding passage corroborates the view I have taken of the intelligible and empirical characters, and shows that Kant (at least in his *opinions*) seems to have ascribed far more certainty and actuality to the noumenon of internal, than to that of external phenomena. At the same time, he never *asserts* this (because indemonstrable); it is also remarkable that, though he contemplates the possibility of noumenal monism, he never suggests the possibility of noumenal nihilism. M.

to actual objects, and cannot possibly, therefore, enlarge our knowledge.

If these remarks are true, the whole of rational psychology falls to the ground with its principal support ; and we can as little here as elsewhere hope to extend our information by pure concepts (still less by consciousness, the mere subjective form of all our concepts). More especially, the fundamental notion of *a simple nature* is such that it cannot be found in any experience at all ; so that there is no way of reaching it as an objectively valid concept.

THE THIRD PARALOGISM, OF PERSONALITY

That which is conscious of its own numerical identity at different times is, so far, a Person.

Now, the soul has this consciousness.

Therefore, it is a Person.

KRITIK OF THE THIRD PARALOGISM OF TRANSCENDENTAL PSYCHOLOGY

If I desire to cognise the numerical identity of an external object by experience, I pay attention to the permanent [part] of the phenomenon, to which, as subject, all the rest refers as determination, and remark the identity of the former in time, while the latter changes.' But I am an object of the internal sense, and all time is merely the form of the internal sense. Consequently, I refer my successive modifications, one and all, to the numerically identical self in all time, that is, in the form of the internal intuition of myself. Upon this ground the personality of the soul should be regarded, not as an inference, but as a perfectly identical assertion of self-consciousness in time ; and this, too, is the reason why it is valid *a priori*. For it

says nothing but this : In all the time in which I am conscious of myself, I am conscious of this time, belonging to the unity of myself ; and it is indifferent whether I say, The whole of time is in me, who am an individual unity ; or, I am, with my numerical identity, present in all this time.

Personal identity, then, must be always found in my own consciousness. But, if I consider myself from the point of view of another person (as an object of his external intuition), this observer external to me first of all considers *me in time* ; for [though] in [my internal] apperception *time* is properly only represented *in me*.¹ He will, consequently, not conclude the objective permanence of myself from the *Ego*, which accompanies all representations at all times *in my consciousness*, and indeed with perfect identity, even though he concedes its presence. For, as the time in which the observer places me is not that which is met with in my sensibility, but in his, the identity which is necessarily bound up with my consciousness is not bound up with his, that is, with an external intuition of my subject.

The identity, then, of the consciousness of myself at

¹ Kant's argument appears to be as follows : When I regard my own internal phenomena, I find them to be all subject to the condition of *time* ; but this time, again (and the phenomena in it), I perceive always as in me, as a form of my internal sensibility ; hence, in internal apperception *self* is the highest condition, to which time is subject. For this reason the identity of self has been regarded as the necessary condition of my existence in time. This is true subjectively (in apperception), but not so objectively, or absolutely ; for, suppose another man perceives me, he perceives me through his external sense, and I am also to him *in time*. But, though he readily admits and believes in my consciousness being accompanied with a full consciousness of identity, this identity is not to him the condition of the time in which *he* places me. He places *me in time*, instead of placing *time in me*. And the feeling of identity which he allows in me is to him no proof that my *self* is objectively permanent ; for it is not necessarily implied by the time in which he places me. M.

different times is only a formal condition of my thoughts and their connexion, and does not demonstrate the numerical identity of my subject, in which, notwithstanding the logical identity of the *Ego*, such a change might have taken place as to preclude its [numerical] identity. We might nevertheless always attribute to it that *Ego*, which never varies in name, and which in every different state, even were the subject changed, could yet always preserve the thought of the previous subject, and hand it over to the succeeding.¹

Although the proposition of some ancient schools—that everything is in a flux, and nothing permanent—cannot stand if we assume substances, it is not refuted by the unity of self-consciousness; for we ourselves cannot decide from our own consciousness whether we, as souls, are permanent or not, because we only consider *that* to belong to our identical selves, of which we are conscious; and so, of course, we judge necessarily that we are the very same in the whole time of which we are conscious. But from the point of view of a stranger we cannot hold this to be a valid inference; because, as we meet in the soul no permanent phenomenon except the representation self, which accompanies and connects all the rest, we can never ascertain whether this *Ego* (a mere thought) is not subject to the

¹ An elastic ball which strikes full upon a similar one imparts to it all its motion, or all its state (if we merely regard places in space). Now, let us assume substances after the analogy of such bodies, where each [reading *je*] imparts representations to the next, along with a consciousness of them. We might thus conceive a whole series of them, the first of which imparted its state, and the consciousness thereof, to the second; this again its own state, along with that of the first, to the third; this again its own and the states of all the previous ones, etc. In such a case the last substance would be conscious of all the states of the previously changed substances as its own, since those states were transferred to it along with the consciousness of them; nevertheless, it would not have been the very same person in all these states.

same flux as the remaining thoughts which are connected by it.

But it is remarkable that the personality, and the permanence which it presupposes—that is, the substantiality of the soul—*must now be proved first*; for, could we presuppose it, there would follow, not indeed the permanence of consciousness, but the possibility of a lasting consciousness in a permanent subject; and this is sufficient for personality, which need not itself cease, even though its action be interrupted for a time. But this permanence is not given us at all before the numerical identity of ourselves, which we infer from the identity of apperception, but is rather inferred from that identity (and after this, to make the argument valid, should follow the concept of substance, which is the only one of them that is of empirical use). Now, as this identity of person by no means follows from the identity of the *Ego* in all the time in which I cognise myself—so we already found that the substantiality of the soul could not be based upon it.

Nevertheless, the concept of personality (as well as that of substance and simplicity) may remain, so far as it is transcendental, and means a unity of the subject otherwise unknown to us, but in whose states there is thoroughgoing connexion through apperception. And so far indeed this concept is both necessary and sufficient for all practical uses; but we can never depend upon it to extend our self-cognition through pure Reason (which mirrors to us a permanence of the subject), from the mere concept of the identical self, as this concept always revolves about itself, and does not assist in solving a single question which aims at synthetical cognition. What sort of thing *per se* (transcendental object) matter may be is wholly unknown to us; nevertheless, its permanence as phenomenon may be

observed when it is represented as something external. But when I wish to observe the mere *Ego* in the alteration of all representations—as I have no other *correlatum* for my comparisons except the same identical self with the universal conditions of my consciousness—I can only give tautological answers to all questions by supplying my concept, and its unity, to those properties which I possess as an object, and so by assuming what was under investigation.

THE FOURTH PARALOGISM, OF IDEALITY (OF EXTERNAL RELATIONS)¹

Whatsoever can only be inferred to exist, as the cause of given perceptions, has only a *doubtful* [problematical] *existence*.

Now, all external phenomena are of such a kind that their present existence cannot be perceived immediately, but we infer them to exist as the cause of given perceptions.

Consequently, the existence of all the objects of the external senses is doubtful. This uncertainty I call the ideality of external phenomena; and the doctrine which holds this ideality is *Idealism*, in contrast to which the assertion of a possible certainty of objects of the external senses is called *Dualism*.

KRITIK OF THE FOURTH PARALOGISM OF TRANSCENDENTAL PSYCHOLOGY

We shall first analyse the premises. We may justly assert that only what is within us can be immediately perceived, and that my own existence alone is the object of a bare

¹ This paralogism does not appear in the Second Edition probably because the 'Refutation' had already settled the question as to the relative dignity and priority of our internal and external experience. M.

perception. Consequently, the existence of an actual object without me (if this word be used in an intellectual sense) is never given immediately in perception, but can only be added in thought to the perception (which is a modification of our internal sense) as its external cause, and so inferred from it. Consequently, Descartes justly restricted all perception in the strictest sense to the proposition, I (as a thinking being) exist; for it is clear that, as the external is not in me, it cannot possibly be found in my apperception, or in any perception, which is properly only a determination of apperception.

I cannot, then, properly perceive external things, but only infer their existence from my internal perception by regarding it as an effect, of which something external is the proximate cause. But the inference from a given effect to a determinate cause is always precarious, because the effect may have been produced by more than one cause.

Consequently, with regard to the relation of perception to its cause, it must ever remain doubtful whether such cause be internal or external—whether all so-called external perceptions are not a mere play of our internal sense, or whether they indeed refer to actual external objects as their causes. At all events, the existence of the latter is only an inference, and runs the risk of all inferences; while, on the contrary, the object of the internal sense (I myself, with all my representations) is perceived immediately, and its existence can be in no doubt.¹

By *idealist*, then, we must not understand the man who denies the existence of external objects, but only one who

¹ This is the very question discussed in the much abused Refutation of Idealism, in the Second Edition. The definition of idealism which immediately follows above, shows how strictly Kant confined both this and the corresponding refutation in the later Editions to Descartes, and did not consider Berkeley, as Fischer and other Germans allege. M.

will not concede that it is known by immediate perception, and who concludes, accordingly, that we can never be absolutely certain of their actuality by any possible experience.

Now, before I propound our paralogism in its delusive form, I must observe that we must necessarily distinguish two sorts of idealism—transcendental and empirical. By the *transcendental idealism* of all phenomena, I mean the doctrine according to which we regard them all as mere representations, not as things *per se*, and according to which space and time are merely sensuous forms of our intuition, not determinations given *per se*, or conditions of objects as things *per se*. Opposed to this doctrine is *transcendental Realism*, which regards space and time as something given *per se* (independent of our sensibility). The transcendental Realist, then, represents to himself external phenomena (if we allow their actuality) as things *per se*, which exist independent of us and our sensibility, and should therefore also be without us according to pure concepts. This transcendental Realist is the proper man to turn empirical idealist; and, after he has falsely assumed of objects of our senses, that if they are to be external, they must possess existence in themselves apart from the senses, he then finds all the representations of our senses insufficient to guarantee the actuality of these representations.¹

The transcendental idealist, on the contrary, can be an empirical Realist, or, as he is called, a *Dualist*; that is, he can concede the existence of matter without going beyond mere self-consciousness, or assuming anything beyond the certainty of the representations in me, or the *cogito ergo sum*. For since he considers this matter, and even its internal possibility,² to be nothing but phenomenon, which apart from our sensibility is nothing at all, he only considers it as

¹ Cf. Fischer's *Commentary*, p. 189. ² Cf. vol. i. p. 268, note.

a kind of representations (intuition) which are called external, *not as if they referred to objects external in themselves*,¹ but because they refer perceptions to space, in which all things are reciprocally external, while space itself is within us.

We have declared ourselves in favour of this transcendental idealism throughout. Accepting our doctrine, all difficulty of admitting the existence of matter on the testimony of our mere consciousness vanishes, as well as of declaring it so proved, just as the existence of myself as a thinking being is so proved. For I am surely conscious of my representations ; these then, and I who have them, exist. But external objects (bodies) are mere phenomena, and nothing at all but a species of my representations, the objects of which only exist through these representations, and apart from them are nothing. External things, therefore, exist just as much as I myself do, and both upon the immediate evidence of my self-consciousness ; with this difference, that the representation of myself as a thinking subject is referred only to the internal sense, but the representations which denote extended existences are referred also to the external sense. With regard to the actuality of external objects, I have just as little need of inference as with regard to the actuality of the object of my internal sense (my thoughts) ; for they are both nothing but representations, the immediate perception (consciousness) of which is likewise a sufficient proof of their actuality.²

¹ Kant here asserts the doctrine of transcendental idealism to be this : that external phenomena do not refer to objects in themselves external to us. From this Kuno Fischer infers (*loc. cit.*) that Kant denied any noumenon to exist as the (hidden) basis of external phenomena. This inference is unwarranted ; for, in Kantian language, neither could the noumenon be called an *object*, nor *external* (in this sense) ; so that the present argument does not touch that question. Cf. below, p. 208. M.

² This is the precise doctrine of the refutation of idealism in the Second Edition (*Kritik*, p. 167). The concluding limitation is also

The transcendental idealist is then an empirical realist, and allows matter, as phenomenon, an actuality which need not be inferred, but is immediately perceived. Transcendental Realism, on the other hand, necessarily becomes perplexed, and is forced to make way for empirical idealism, because it regards the objects of external senses as something distinct from the senses themselves, and mere phenomena as independent beings existing without us. However perfectly we may be conscious of our representation of these things, this is far from proving that, if the representation exists, its corresponding object must also exist; while on our system, these external things (or matter, in all its forms and changes) are nothing but mere phenomena, or representations in us, of whose actuality we are immediately conscious.

As all the psychologists who subscribe to empirical idealism are, as far as I know, also transcendental realists, they have been perfectly consistent in attaching great weight to empirical idealism, as one of those problems which human reason can hardly solve. For, most assuredly, if we regard external phenomena as representations which are produced in us by their object—a thing *per se* existing without us—then how can its existence be known, except by inferring the cause from the effect, in which case it must always remain doubtful whether this latter be within or without us? Now it may indeed be conceded that something is possibly the cause of our external intuitions, which is without us in the transcendental sense; but this is not the object which we understand by the representations of

there distinctly implied in the statement (p. 166) that the Aesthetic has removed all possibility of making space a property of things *per se*. 'For in such case both it and they become perfectly impossible and absurd.' Yet the argument which follows has been interpreted by all Kant's critics as implying this absurdity! M.

matter and corporeal things ;¹ for these are mere phenomena—mere species of representation—which are in all cases only within us ; and their actuality rests upon immediate consciousness, just as the consciousness of my thoughts does. The transcendental object, as well of internal as of external intuition, is to us equally unknown. Not this however, but the empirical object, is in question, which is called *external* if *it is in space*—*internal*, if it is represented *in time-relations* only ; but space and time are both only to be found *within us*.

But, as the expression *without us* is unavoidably ambiguous (meaning either that which exists as a thing *per se*, distinct from us, or merely that which belongs to *external phenomena*), in order to secure to this concept the latter meaning—being that in which the psychological question about the reality of our external intuition arises—we shall distinguish *empirically external* objects from those possibly so called in a transcendental sense, by denominating them simply things *which can be perceived in space*.

Space and Time are indeed representations *a priori* present to us as forms of our sensuous intuition, before any actual object has determined us by sensation to represent it under these sensuous relations. But this material or real something, which is to be intuited in space, necessarily

¹ The theory which Kant is here opposing asserts that there are external objects, corresponding to, and resembling in some way, our perceptions. He does not here desire to refute his own doctrine, that there are possibly noumena at the basis of phenomena, but to prove that these noumena cannot be objects in space. If this be the meaning of his argument (which is somewhat obscurely expressed), Kuno Fischer is just as much mistaken in asserting that Kant here denies any special noumena for external phenomena, as he is in interpreting the 'Refutation of idealism' to be the assertion of noumena in space. M.

presupposes perception,¹ and cannot be in any way imagined or produced independently of this perception, which announces the actuality of something in space. It is then sensation which indicates actuality in space and time, as soon as this sensation has been referred to either species of sensuous intuition. Sensation, when applied to an object in general, without determining it, is called perception. This sensation being given, by means of its manifoldness we can imagine various objects which, beyond imagination, have no empirical place in space or time. Whatever examples then of sensations we take, whether pleasure or pain, or external ones like colour and heat, this remains quite certain, that perception is that through which the material must be given, in order to supply objects to sensuous intuition. This perception then (to keep to external intuitions at present), represents something actual in space. For in the first place, perception is the representation of an actuality, as space is of the mere possibility, of simultaneous existence. Secondly, this actuality is represented for the external sense, that is, in space. Thirdly, space itself is nothing but mere representation. Nothing then can be considered as actual in space, except that which is represented in it ;² and, *vice versa*, what is given in space (or represented through perception) is also actual in it ; for, were it not actual in it—that is, were it not given immediately by empirical intuition—it could not be invented,

¹ Here is an assertion expressly contradicting Kuno Fischer's doctrine that the external thing is (in itself) nothing but our sensation. It *presupposes*, as a necessary condition of being perceived, our faculty of perception, but cannot be asserted identical with it. The sequel is still more explicit. M.

² This paradoxical, but true, proposition should be carefully noted—viz., nothing is in space except what is represented in it. For space itself is nothing but representations ; consequently, whatsoever is in space must be contained in the representation, and there is nothing at

because the real element in intuitions cannot at all be obtained by *a priori* thinking.

All external perception, then, proves immediately that there is something actual in space, or rather it is itself this very actuality, and so far empirical realism is beyond question; that is to say, there corresponds to external intuitions something actual in space. It is true that space itself, with all its phenomena, only exists within me; but nevertheless in this space reality, or the material of all objects of external intuition, is given actually and independently of all invention. It is also impossible that in *this space* anything *without* us (in the transcendental sense) should be given, because space itself, apart from our sensibility, is nothing. The most extreme idealist cannot, then, call upon us to prove that the object without us (in the strict sense) corresponds to our perception. For if such a thing did exist, it could not be represented or intuited as without us, since this would presuppose space; and actuality in space, as of a mere representation, is nothing but the perception itself. That which is real in external phenomena is only actual in perception, nor can it be actual in any other sense.

From perception we can produce objects, either by the play of fancy, or through experience. And so, no doubt, illusive representations may arise, not corresponding with objects, and we must ascribe this illusion either to images of the fancy (dreams), or to a mistake of the faculty of judgment (in the case of the so-called deceptions of the

all in space except so far as it is actually represented in it. The assertion, no doubt, sounds strange—that a thing can only exist in its own representation; but the absurdity is here obviated since we are concerned not with things *per se*, but only with phenomena—sc. representations.

senses). To avoid these illusions, we proceed according to the following rule : *that which is connected with a perception according to empirical laws is actual*.¹ But this illusion, as well as the caution against it, affects idealism, as well as dualism, since it only concerns the form of experience. In order to refute empirical idealism, which falsely questions the objective reality of external perceptions, it is enough that external perception should immediately prove an actuality in space, which space, although it be the mere form of representations, nevertheless possesses objective reality with regard to all external phenomena, which are nothing but representations. It is enough to show that without perception even invention and dreaming would be impossible ; so that our external senses, as far as the data for experience are concerned, must have their actual corresponding object in space.

The man who *denies* the existence of matter would be the *dogmatical idealist* ; he who *doubts* it, because it cannot be proved, would be the *sceptical idealist*. The former theory results from believing that there are contradictions in the possibility of there being matter at all—a question with which we are not yet concerned. The following section, on dialectical syllogisms, which portrays the reason in internal conflict about the concepts which it has formed as regards the possibility of what belongs to connected experience, will help to solve that difficulty [of dogmatic idealism]. But the sceptical idealist, who only attacks the grounds of our assertion, and declares our conviction of the existence of matter to be insufficient—which we believe we can found on immediate perception—such a man is a benefactor to human reason, since he compels us, even in

¹ The whole discussion turns on this, the second postulate of empirical thought. Cf. vol. i. p. 193. B.

the most trifling steps of ordinary experience, to keep wide awake, and not to annex as lawful property anything that we have obtained by foul means. The use of these idealistic objections is now quite clear. They force us, if we wish to avoid confusion in our most ordinary assertions, to consider all perceptions, whether internal or external, as merely the consciousness of what belongs to our sensibility; and their external objects not as things *per se*, but only representations, of which we are as immediately conscious as of any other representations. They are only called external because they belong to that sense which we call the external sense, of which the intuition is space; and this space is nothing but an internal species of representation, in which certain perceptions are connected with one another.

Supposing we allowed external objects to be things *per se*, it would be absolutely impossible to comprehend how we could obtain a knowledge of their actuality without us, since we rely merely on the representation which is within us. For, since no one can have a sensation without himself, but only within, the whole of self-consciousness gives us nothing but our own determinations. Consequently sceptical idealism compels us to take refuge in the only course still open, that is, in the ideality of all phenomena; and this we expounded in the transcendental Aesthetic, independent of the consequences, which we could not have then foreseen. If it be now asked, whether dualism must consequently follow in psychology, we answer, certainly, but only in the empirical sense; that is to say, in the connected whole of experience, matter, as substance in phenomena, is actually given to the external sense, and the thinking *Ego* is also given to the internal sense, as substance in the phenomenon; and in both cases phenomena must be connected according to the rules which this Category

[of substance] introduces into the connexion of our external as well as internal representations. But if we desire to widen, as is usual, the notion of dualism, and take it in its transcendental sense, then neither this doctrine, nor *Pneumatism* nor *Materialism*, which oppose it from different sides, have the least basis. We should then miss the proper determination of our concepts, and consider a difference in the mode of representation of objects (which remain unknown to us, as to what they are in themselves) to be a difference in these things themselves. *I*, who am represented through the internal sense as in time, and *objects* without me, are indeed phenomena totally distinct in kind, but need not therefore be thought as distinct things. The *transcendental object*, which lies at the basis of internal intuition as well as of external phenomena, is neither matter, nor a thinking being *per se*, but a basis of phenomena unknown to us, and these give us the empirical concept as well of the first as of the second.

If then, as the present *Kritik* plainly compels us, we keep faithfully to the rule we have established, not to push our questions any further than possible experience has supplied us with objects for them, it will never even come into our heads to make investigations about the objects of our senses as to what they may be in themselves, out of relation to our senses. But if the psychologist takes phenomena for things in themselves, he may, as a materialist, accept for his doctrine nothing but matter; or, as a spiritualist, nothing but thinking beings (according to the form of our internal sense); or even, as a dualist, he may regard both to be things existing *per se*. In any case his misconception will condemn him to be ever speculating how that is to exist *per se* which is no thing *per se*, but only the phenomenon of a thing in general.

REFLECTION CONCERNING THE WHOLE OF PURE PSYCHOLOGY, AS AN APPENDIX TO THESE PARALOGISMS

If we contrast the *doctrine of the soul* [psychology], as the physiology of the internal sense, with the *science of bodies*—as the physiology of the objects of the external senses—we shall find (in addition to the fact that in both we know a great deal empirically) this remarkable difference, that in the latter science much can be cognised *a priori* from the mere concept of an extended incompressible being; whereas in the former, from the concept of a thinking being, nothing can be cognised synthetically *a priori*. Because although both are phenomena, yet the phenomenon presented to the external sense has something permanent¹ or fixed, which gives a *substratum* lying at the basis of changeable determinations, and so gives us a synthetical concept, namely, that of space and a phenomenon in it. Time, on the contrary, which is the only form of our internal intuition, has nothing permanent in it; so that it only lets us know the change of determinations, not the determinable object. For in that which we call the soul everything is in a continuous flux, and nothing is permanent except (if you *will* have it so) the *Ego*, which is perfectly simple, merely because this representation has no content or multiplicity; for which reason it seems to represent or, I should rather say, indicate a simple object. In order to produce a pure rational cognition of the nature of a thinking being in general, this *Ego* should be an intuition, which, being presupposed in all thinking (antecedent to any experi-

¹ This important passage again anticipates (almost verbally) the refutation of idealism of the Second Edition. It shows the superior dignity of external *experience*, as contrasted with internal, in affording us data for science. M.

ence), should give us synthetical *a priori* propositions. But this *Ego* is just as little an intuition as it is a concept of any object, being merely the form of consciousness which can accompany both kinds of representations, and raise them to cognitions, so far as something else is given in intuition which supplies the material for the representation of an object. Thus all rational psychology falls to the ground, being a science surpassing all the powers of the human reason; and there remains nothing for us except to study our souls according to the clue given by experience, and to keep within the limits of questions not exceeding the content which can possibly be given by internal experience.

But though this science does not give us ampliative knowledge, but is composed (when it attempts to do so) of nothing but paralogisms, yet we cannot deny it an important negative use, if we consider it as nothing but a critical treatment of our dialectical syllogisms, and indeed of the ordinary natural reason.

Why do we require a psychology founded upon pure principles of the Reason only? Without doubt, for the particular object of securing our thinking self from the danger of Materialism. This is done by the rational notion of our thinking self, which we have set forth; for, instead of there being any danger that if matter were taken away, all thinking—and even the existence of thinking beings—would consequently vanish, it is rather clearly shown that, if I take away the thinking subject, the whole world of matter must vanish, being only what appears in the sensibility of our subject, as a species of its representations.

Having proved this, I am of course not in the least better able to know this thinking self by its properties. Nay, I cannot even prove its existence to be independent of the transcendental *substratum* (whatever it is) of external

phenomena ; for both are to me unknown. Yet, as it is possible for me to find a reason in other than merely speculative grounds for hoping that my thinking nature will remain permanent in the midst of all possible changes of state—as this is possible, though I openly confess my own ignorance—an important point is gained, since I am able to repel the dogmatical attacks of speculative opponents, and show them that they can never know more of the nature of my thinking subject, to enable them to deny the possibility of my hopes, than I can, to enable me to maintain them.

On this transcendental illusion in our psychological concepts are based three additional dialectical questions, which form the proper object of rational psychology, and which can only be decided by the foregoing investigations. These are :—(*a*) The possibility of the community of the soul and an organic body, *i.e.* the animality and condition of the soul in this life ; (*β*) The commencement of this community, *i.e.* the state of the soul at and before birth ; (*γ*) The end of this community, *i.e.* the state of the soul at and after death (the question of immortality).

Now I assert that all the difficulties with which these questions are supposed to be beset, and with which, used as dogmatical objections, men pretend to a deeper insight into the nature of things than can be obtained by plain common sense—I say that all such difficulties are based on a mere delusion, by which what only exists in our thoughts is hypostatised, and, without its quality being changed, assumed to be an actual object without the thinking subject : for example, extension, which is nothing but a phenomenon, is taken for a property of external things existing apart from our sensibility ; and motion is regarded as their action, taking place actually in itself, even apart from our senses. For matter, the community of which with the soul raises such

difficulties, is nothing but a mere form, or a certain species, of the representation of an unknown object through that intuition which is called the external sense. There may indeed, then, be something without us to which this phenomenon, which we call matter, corresponds; but in the same quality as phenomenon it is not without us [in the transcendental sense], but merely a thought within us, although this thought (through the sense just mentioned) represents it as to be found without us.¹ Matter then signifies, not a species of substance, thus distinct and heterogeneous from the object of the internal sense (soul), but only the difference in kind of the phenomena of objects (in themselves unknown to us), whose representations we call external, as compared with those ascribed to the internal sense, even though the former belong just as much to the thinking subject as do all the rest of our thoughts. They have, however, this illusion about them, that as they represent objects in space, they as it were sever themselves from the soul, and seem to exist separate from it, although space itself, in which they are intuited, is nothing but a representation, the object of which, in the same quality, cannot be met at all without the soul. Accordingly, the question is no longer about the community of the soul with other known and heterogeneous substances without us, but merely concerning the connexion of the representations of the internal sense with the modifications of our external sensibility; and how it is that these are connected together according to constant laws, so as to form one systematic experience.

As long as we conjoin in experience internal and external

¹ Here is a plain assertion of what I before explained, that Kant is refuting, not a thing *per se*, about which we can assert nothing, but such an absurdity as a noumenon in space. M.

phenomena as mere representations, we find nothing absurd or strange in the community of both species of sense. But as soon as we hypostatise external phenomena, and consider them no longer as representations, *but as things existing by themselves without us, in the same quality as they are in us*, and refer their activity, which they exhibit as phenomena in mutual relation, to our thinking subject—if we do this, the effective causes without us assume a character which will not tally with their effects in us, because the former refers merely to the external, the latter to the internal, sense; and, though these are united in one subject, they are still very different in kind. Here, then, we have no external effects, except changes of place, and no forces except tendencies which concern relations in space as their effects. But within us the effects are thoughts, among which no relation of place, motion, figure, or any space-determination takes place; and we lose the clue to the causes altogether in the effects, which they should manifest in the internal sense. But we ought to remember that bodies are not objects *per se*, present to us, but a mere appearance of nobody-knows-what-sort-of unknown object; that motion is not the effect of this unknown cause, but merely the appearance of its influence on our senses; consequently, that both are not anything without us, but mere representations within us. It follows, that it is not the motion of matter which produces representations in us, but that this motion itself (and matter also, which makes itself cognoscible by this means) is mere representation; and, finally, that the whole difficulty we have conjured up amounts to this: how, and through what cause, the representations of our sensibility are so related, that those which we call external intuitions can be represented as objects without us, according to empirical laws. This

question by no means contains the supposed difficulty of explaining the origin of the representations of causes which exist without us, and act in a foreign way—in that we take the appearances of an unknown cause to be a cause without us—a proceeding which can breed nothing but confusion. In those judgments where there occurs a misconception rooted in long habit, it is not possible to bring the correction [of the error] within our grasp, in the same degree as in those other cases where no such unavoidable illusion confuses our concepts. Hence this our emancipation of the reason from sophistical theories, can hardly as yet have the clearness which alone produces perfect satisfaction.

I hope to make the matter plainer in the following way :—

All *objections* may be divided into *dogmatical*, *critical*, and *sceptical*. A dogmatical objection is directed against a *proposition* ; a critical, against the *proof* of a proposition. The former presupposes an insight into the nature of an object, in order that we may be able to assert the reverse of what is stated concerning the object ; such a proposition, then, is itself dogmatical, and professes to know more of the property in question than its opponent. The critical objection, as it never touches the truth or falsity of the proposition, and only attacks the proof, does not require, or pretend to, a better knowledge of the object than the opposed assertion ; it only proves the assertion groundless—not that it is false. The sceptical objection opposes mutually the proposition and its contradictory, as objections of equal value, proposing each in turn as a dogma, and the other as the objection to it, and so appears to be from opposite sides dogmatical, in order to destroy completely any judgment about the object. Both the dogmatical and sceptical objections must pretend to so much insight

into their objects as is necessary to assert something of them affirmatively or negatively. The critical alone differs from them, in that it overthrows the theory by showing that something worthless or merely imaginary has been assumed in its assertions, and by removing this supposed foundation, without wishing to assert anything concerning the nature of the object.

Now according to the ordinary notions of our reason as to the community in which our thinking subject stands with things without us, we are dogmatical, and regard them as true objects, existing independent of us, according to a transcendental dualism, which does not attribute these external phenomena, as representations, to the subject, but transports them, just as we get them from sensuous intuition, out of ourselves as objects, which this dualism separates completely from the thinking subject. This *subreptio* is the foundation of all theories as to the community between body and soul; and the question is never raised whether the objective reality of phenomena be certainly true: this is rather assumed as conceded, and fallacious reasonings started as to its explanation or conception. The three ordinary systems invented to meet this difficulty, and indeed the only possible ones, are those of *physical influence*, of *pre-established harmony*, and of *supernatural assistance*.

The two latter explanations of the community of the soul with matter are based upon objections to the first (which is the representation of common sense), namely, that what appears as matter cannot by immediate influence be the cause of representations, which are a perfectly heterogeneous sort of effect. But when men argue in this way [it is clear that] they cannot unite with the 'object of the external sensibility' the notion of a matter which is

only phenomenon, or in itself mere representation, produced by any sort of external objects ; for if they held this, they would have said that the representations of external objects (phenomena) cannot be external causes of phenomena in our minds—a senseless objection, for it never could come into any man's head to consider that what he had already acknowledged to be mere representation was an external cause. According to our principles, their theory must rather attempt to show that the true (transcendental) object of our external senses cannot be the cause of those representations (phenomena) which we understand by the word matter. Now, as no one can pretend with any reason to know aught of the transcendental cause of the representations of our external senses, their assertion is quite groundless. But, if the pretended correctors of the doctrine of physical influence regard matter as such (after the usual manner of transcendental dualism) to be a thing *per se* (and not the mere phenomenon of an unknown thing), and direct their objections to prove that such an external object, which exhibits no other sort of causality except motions, can never be the efficient cause of representations, but that a third being must interfere to produce, if not reciprocal action, at least correspondence or harmony between both ; [if these theorists take this course] then their refutation of their opponents must begin by assuming the [same] *πρῶτον ψεῦδος* [as the theory] of physical influence in their own dualism ; and so by their objection they would not so much refute Natural Influence as refute their own dualistic assumption. For all difficulties which beset the connexion of thinking nature with matter arise, without exception, merely from the insinuation of the dualistic representation, that matter as such is not phenomenon, or a mere representation of the mind, to which an

unknown object corresponds, but is that object in itself, as it exists without us, and apart from all sensibility.

There can, then, be no dogmatical objection made to the usually accepted Physical Influence; for, if our opponent assumes that matter and its motion are mere phenomena, and therefore themselves mere representations, he can only raise this difficulty, that the unknown object of our sensibility cannot be the cause of representations in us—a thing which he has not the least right to assert, because nobody can tell of an unknown object what it can or cannot do. He must, however, after the proofs given above, necessarily concede this transcendental idealism, so far as he does not openly hypostatise representations, and place them, as true things, without himself.

But a well-founded *critical objection* can still be made to the common doctrine of physical influence. Such a pretended community between two kinds of substances—the thinking and the extended—presupposes a gross dualism, and makes the latter, which are nothing but mere representations of the thinking subject, into things existing *per se*. Physical influence thus misconceived may then be completely overthrown by showing its grounds of proof to be idle, and surreptitiously obtained.

The notable question concerning the community of that which thinks and that which is extended—if we discard all fictions—would simply come to this: *How external intuition, viz. that of space (the occupation of it, figure and motion) can be at all possible in a thinking subject?* But to this question no man can ever find an answer; and we can never supply this gap in our knowledge, but only indicate it by ascribing external phenomena to a transcendental object (as the cause

of this sort of phenomena), which however we do not know, and of which we can never obtain any notion. In all problems which may arise in the field of experience we treat these phenomena as objects *per se*, without concerning ourselves about the highest ground [or condition] of their possibility. But, if we transgress this boundary, the concept of a transcendental object becomes necessary.

From these considerations about the community between extended and thinking beings there follows, as an immediate consequence, the settlement of all disputes or objections which concern the condition of this thinking nature before the community (this life), or after its cessation (in death). The opinion that the thinking subject could think previous to any community with the body would be thus expressed: that before the commencement of this sort of sensibility, by which something appears to us in space, the same transcendental objects—which in our present condition appear as bodies—may have been intuited quite differently. The opinion that the soul, after the cessation of all community with the corporeal world, can still continue to think, would announce itself in this form: that when that sort of sensibility ceases by which transcendental—and now wholly unknown—objects appear to us, all intuition of them may not consequently vanish; and that it is quite possible for the same unknown objects to continue being cognised by the subject, though, of course, no longer in the quality of bodies.¹

¹ To assert of the writer of the preceding argument that he is an absolute idealist is surely very strange criticism. It is impossible to conceive a more distinct and official refusal to accept that extreme doctrine. M.

Now it is true that no one can show the smallest foundation for such an assertion from speculative principles, or even explain its possibility, but only presuppose it; yet on the other hand no one can oppose it with any valid dogmatical objection. For, whoever he may be, he knows no more of the absolute and internal cause of external or corporeal phenomena than I or anybody else. He cannot then reasonably pretend to know on what the actuality of external phenomena depends in the present state (in life), nor consequently, that the condition of all external intuition, or even that the thinking subject itself, must cease to exist after this state (in death).

The whole dispute, then, about the nature of our thinking being and its connexion with the world of matter, merely arises from our supplying the gaps in our knowledge by paralogisms of the Reason, in that we make our thoughts to be things, and hypostatise them, whence arises an imaginary science, both as regards its affirmations and its negations. We either pretend to know something of objects, of which nobody has the least notion, or we consider our own representations to be objects, and so become involved in a perpetual circle of ambiguities and contradictions. Nothing but the sobriety of a severe but fair *Kritik* can free us from this dogmatical illusion, which enslaves so many of us in fancied happiness under theories and systems, and can restrict all our speculative claims to the field of possible experience—not indeed by ill-natured ridicule of our many failures, nor by pious laments about the limits of our reason, but by determining these limits accurately according to fixed principles. By this means its ‘thus far, and no farther,’ is most securely fixed at those pillars of Hercules which nature herself has set up, in order to allow the voyage of our reason to extend only as far as the

receding coasts of experience reach—coasts that we cannot leave without venturing into a boundless ocean, which, after constant illusions, ultimately compels us to give up as hopeless all our laborious and tedious efforts.

We still owe to our reader a distinct and general explanation of the transcendental and yet natural illusion in the paralogisms of the pure Reason, as well as a justification of their systematic arrangement running parallel to the Categories. This we could not undertake at the commencement of the section without the danger of becoming obscure, or awkwardly anticipating ourselves. We now desire to discharge this obligation.

We can consider all illusion to consist in this—that the subjective condition of thinking is taken for the cognition of the object. We have further shown, in the introduction to the transcendental Dialectic, that pure Reason is merely concerned with the totality of the synthesis of the conditions of a given conditioned. Now, as the dialectical illusion of the pure Reason cannot be an empirical illusion, occurring with determinate empirical cognition, it must concern the conditions of thinking generally, and there can be only three cases of dialectical use of the pure Reason—

1. The synthesis of the conditions of a thought in general ;

2. The synthesis of the conditions of empirical thinking ;

3. The synthesis of the conditions of pure thinking.

In all these cases the pure Reason merely employs itself upon the absolute totality of this synthesis ; that is, upon that condition which is itself unconditioned. On this division also is founded the threefold transcendental illusion, which gives rise to the three divisions of the dialectic, and

affords the Idea to just as many apparent sciences arising out of pure Reason—to transcendental psychology, cosmology, and theology. We are here only concerned with the first.

As in the case of thinking in general we abstract from all relation of our thought to any object (be it of the senses, or of the pure understanding), the synthesis of the conditions of a thought in general (No. 1) is not at all objective, but merely a synthesis of the thought with the subject, which synthesis is falsely held to be a synthetical representation of an object.

But it follows from this, that the dialectical inference to the condition of all thinking in general, which is itself unconditioned, does not make a mistake as to content (for it abstracts from all content or object), but that it is merely false as to form, and must be called a paralogism.

Furthermore, as the condition which accompanies all thinking is the *Ego*, in the general proposition, 'I think,' Reason must be concerned with this condition, so far as it is itself unconditioned. But this is only the formal condition or logical unity of every thought, in which I abstract from all objects, and yet it is represented as an object which I think, that is, the *Ego* and its unconditioned unity.

Suppose any one were to put me the general question: Of what sort of nature is a thinking being? I do not in the least know how to answer the question *a priori*, because the answer must be synthetical (for an analytical answer might, perhaps, explain thinking, but could not extend our knowledge of that upon which thinking depends as to its possibility). But for every synthetical solution intuition is necessary, a point which is wholly passed over in the vague problem proposed. It is equally impossible to answer, in all its generality, the question: Of what

nature must a thing capable of motion be? For incompressible extension (matter) is not then given to us. Yet, although I know no answer in general to that sort of question, it appears to me that I might give one in the special case of the proposition, 'I think,' which expresses consciousness. For this *Ego* is the first subject—that is, substance—it is simple, etc. But these must be mere empirical judgments, which, at the same time, could not contain any such predicates (which are not empirical), without a general rule to express the conditions of the possibility of thinking them in general, and this *a priori*.¹ Thus, what I at first thought so feasible (viz. judgments concerning the nature of the thinking being, and this from pure concepts), becomes suspicious, even though I have not yet discovered my mistake.

But the further investigation into the origin of these properties, which I attribute to myself, as a thinking being in general, exposes the error. They are nothing more than pure Categories, by which I can never think a determined object, but only the unity of representations, in order to determine them as an object. Without being founded on an intuition, the Category alone can never provide me with a concept of an object; for only by intuition is the object given, which is afterwards thought in accordance with the Category. If I assert a thing to be a substance in phenomenon, the predicates of its intuition must have been previously given to me, by which I distinguish the permanent from the changeable, and the *substratum* (thing in itself) from what is merely attached to it. If I call a thing *simple* in phenomenon, I mean by this that its intuition, indeed, is part of my phenomena, but is itself not divisible, etc. But if anything is known to be simple only in

¹ Read *diese* for *dieses* and *könnten* for *könnte*. M.

concept, and not in appearance, then I have actually no knowledge at all of the object, but only of my concept, which I frame about *something* in general, and which is not capable of being properly intuited. I only say that I think a thing to be quite simple, because I can actually say nothing more about it, except merely that it is something.

Now, mere apperception (*Ego*) is in concept substance, is in concept simple, etc., and so far all these psychological dogmas have indisputable truth. Yet what we want to know about the soul is not at all discoverable in this way ; for, since none of these predicates are valid of intuition, and since therefore they can have no consequence applicable to objects of experience, they are quite void. For the above-mentioned concept of substance does not teach me that the soul continues to exist by itself, nor that it is a part of the external intuitions, which cannot itself be further divided, and which can, consequently, neither originate nor pass away by any changes of nature : all of which are properties which would make the soul cognoscible to me in the connexion of experience, and might throw some light upon its origin and future state. But when I assert by the mere Category, that the soul is a simple substance, it is clear that as the mere concept of substance contains nothing but this, that a thing shall be represented as a subject *per se*, without also being the predicate of another [it is clear, I say that] from this concept no permanence follows, and that the attribute of simplicity could certainly not add this permanence ; so that we are not in the least informed of what might happen to the soul in the changes of the world. If we could be told that it is a *simple part of matter*, we might, owing to what experience tells us, infer permanence, and along with its simple nature indestructibility. But about

this, the concept of the *Ego* in the psychological first principle (I think) tells us not a word.

The following is the reason that the being which in us imagines it can cognise itself by pure Categories, and indeed by those which express absolute unity under each of their classes. Apperception is itself the ground of the possibility of the Categories, which on their side represent nothing but the synthesis of the manifold in intuition, so far as it has unity in apperception. Hence, self-consciousness in general is the representation of that which is the condition of all unity, and yet itself unconditioned. Of the thinking *Ego*, then, or soul (which represents itself as substance, simple, numerically identical at all times, and the *correlatum* of all existence, from which all other existence must be inferred), we may say, that it does not cognise *itself through the Categories*, but rather the Categories, and through them all objects in the absolute unity of apperception, viz. *through itself*. It is indeed quite plain that what I must presuppose in order to cognise any object at all, I cannot also cognise as an object ; and that the determining *self* (thinking) is distinguished from the determinable self (the thinking subject), as cognition is from objects. Still nothing is more natural or seductive than the illusion of considering the unity in the synthesis of thoughts to be a perceived unity in the subject of these thoughts. We might call it the subreption of hypostatized consciousness (*apperceptionis substantiatae*).¹

If we wish to give its logical name to the paralogism in the dialectical syllogisms of rational psychology, so far as their premises are in themselves true, it may be called a *sophisma figurae dictionis*, in which the major premiss makes

¹ I cannot but think that Mansel's theory of self being presented as substance is here clearly refuted. M.

merely a transcendental use of the Category with reference to its condition, but the minor premiss and conclusion make of the same Category an empirical use with reference to the soul, which has been subsumed under this condition. So, for example, in the paralogism of simplicity the concept of substance is a pure intellectual concept, which, without the condition of sensuous intuition, is merely of transcendental, that is, of no, use. But in the minor premiss the very same concept is applied to the object of all internal experience, yet without first establishing and laying down as a basis the condition of its application *in concreto*, that is, its permanence; hence, there is here an empirical, though illegitimate, application made of it. In order to show the systematic connexion of all these dialectical assertions in a fallacious psychology, as connected in the pure Reason—that is, in order to show its completeness—observe that the apperception is carried through all the classes of the Categories, but only applied to those concepts of the understanding which in each [class] supply to the rest the basis of unity in a possible perception, and these are—subsistence, reality, unity (not plurality), and existence; only that Reason here represents them as the conditions of the possibility of a thinking being, which conditions are themselves conditioned. Consequently, the soul cognises itself as—

1. The unconditioned unity of *Relation*, that is, not as inhering, but *subsisting*;
2. The unconditioned unity of *Quality*, that is, not as a real whole, but *simple*; ¹

¹ How the simple here again corresponds to the Category of Reality, I am as yet unable to show; but it will be explained upon the occasion of another rational use of the very same concept. [Simplicity corresponds to unconditioned Reality, for the reality of a composite whole depends on that of each of its parts. B.]

3. The unconditioned unity in *plurality in time*, that is, not in different times numerically different, but as *one* and the very *same subject* ;

4. The unconditioned unity of *existence in space*, that is not as the consciousness of several things without it, but *only of its own existence*, and of other things, on the contrary, merely as its *representations*.

Reason is the faculty of principles. The assertions of pure psychology do not contain empirical predicates of the soul, but those which, if they occur, should determine the object *per se* independent of experience, that is, through the pure Reason. They must, then, be fairly based upon principles and universal notions of thinking natures in general. Instead of this, we find that the single representation, *I am*, governs the whole of it, which, because it expresses the pure formula of all my experience (indeterminately), announces itself as an universal proposition, valid for all thinking beings ; and, as it is single from every point of view, assumes the appearance of an absolute unity in the conditions of thinking in general, and so extends itself further than possible experience can reach.

APPENDIX D

[*Part of the 9th Section of the Antinomy of the Pure Reason.*]

POSSIBILITY OF CAUSALITY THROUGH FREEDOM IN HARMONY WITH THE UNIVERSAL LAW OF NATURAL NECESSITY

THAT in an object of the senses which is not itself phenomenon, I term *intelligible*. If, accordingly, an object which must be regarded as a phenomenon in the sensuous world possesses in itself [or *per se*] also a faculty which is not an object of sensuous intuition, but by means of which it is capable of being the cause of phenomena, the *causality* of this being may be regarded from two different points of view. The causality may be considered to be *intelligible*, as regards its *action*—the action of a thing in itself—and also *sensible*, as regards its *effects* as a phenomenon belonging to the sensuous world.

We should, accordingly, have to form both an empirical concept of the faculty of such a subject, as well as an intellectual concept of its causality, which both occur together in one and the same effect. This twofold manner of thinking the faculty of a sensuous object does not run

counter to any of the concepts which we ought to form of phenomena, or of possible experience ; for as phenomena—not being things in themselves—must have a transcendental object as a foundation, which determines them as mere representations, there seems to be no reason why we should not ascribe to this transcendental object, in addition to the property by means of which it appears, a *causality* which is not a phenomenon, although its *effects* are observed in the world of phenomena.

But every effective cause must possess a *character*—that is to say, a law of its causality—without which it would not be a cause at all. Accordingly, in a subject of the world of sense we should have an *empirical character*, which guaranteed that its actions, as phenomena, stand in complete and harmonious connexion, conformably to unvarying natural laws, with all other phenomena, and can be deduced from these as conditions ; and that they do thus, in connexion with these, constitute members of a single series in the order of nature.

In the second place, we should be obliged to concede to it an *intelligible character* also, by means of which it is indeed the cause of those actions as phenomena, but which is not itself a phenomenon, nor subordinate to the conditions of the world of sense. The former may be termed the character of the thing as a phenomenon ; the latter, the character of the thing as a thing *per se*.

Now this acting subject would, in its intelligible character, be subject to no conditions of time ; for time is only a condition of phenomena, and not of things in themselves. No *action* would *begin* or *cease to be* in this subject ; it would, consequently, be free from the law of all determination of time—of all change—namely, that everything *which happens* must have a cause in the *phenomena* (of the

preceding state). In a word, the causality of the subject, in so far as it is intelligible, would not form a part of the series of empirical conditions which necessitated the event in the world of sense. Again, this intelligible character of a thing could indeed never be immediately cognised, because we can perceive nothing except so far as it appears, but it must still be thought in accordance [or analogy] with the empirical character; just as we find ourselves compelled in a general way, to place, in thought, a transcendental object at the basis of phenomena, although we know nothing of what it is in itself.

Accordingly, as to its empirical character, this subject being a phenomenon, would be subject to the causal *nexus* in all the laws of its determination; and it would so far be nothing but a part of the world of sense, of which the effects would follow without fail from nature, like every other phenomenon. When influenced by external phenomena—when cognised through experience in its empirical character, *i.e.* in the law of its causality—all its actions must be explicable according to natural laws, and all the requisites for their complete and necessary determination must occur in possible experience.

By virtue of its intelligible character, on the other hand (although we possess only the general notion of this character), the subject must be regarded as free from all sensuous influences, and from all phenomenal determination. Moreover, as nothing happens in this subject—as far as it is a *noumenon*—and there does not, consequently, exist in it any change demanding the dynamical determination of time, and for the same reason no connexion with phenomena as its causes—this active being must, in its actions, be so far free from and independent of natural necessity, for this necessity exists only in sensibility. It would be quite

correct to say that it originates or begins its effects in the world of sense from itself without the action beginning in itself. We should not be in this case affirming that these sensuous effects began to exist of themselves, because they are always determined by prior empirical conditions, but only by virtue of the empirical character (which is the phenomenon of the intelligible character), and are possible only as constituting a continuation of the series of natural causes. And thus nature and freedom—each in its complete signification—can meet, without contradiction or disagreement, in the same action, according as it is compared with its intelligible or sensible cause.

FURTHER ELUCIDATION OF THE COSMOLOGICAL IDEA
OF FREEDOM IN COMBINATION WITH THE UNIVERSAL
LAW OF NATURAL NECESSITY.

I have thought it advisable to lay before the reader at first a mere sketch of the solution of this transcendental problem, in order to enable him to form with greater ease a clear notion of the course which Reason must adopt in the solution. I shall now proceed to exhibit the several *momenta* of this solution, and to consider them in their order. The natural law, that everything which happens must have a cause ; that the causality of this cause, that is, *the action* (which cannot always have existed, but must be itself an *event*, for it precedes in time some effect which has then *originated*), must have its cause among phenomena by which it is determined ; and consequently, that all events are empirically determined in an order of nature—this law, I say, which lies at the foundation of the possibility of experience and of a connected system of phenomena, or *nature*, is a law of the understanding, from

which no departure, and to which no exception, can be admitted. For to except even a single phenomenon from its operation is to exclude it from the sphere of possible experience, and make it a mere fiction of thought, or phantom of the brain.

Thus we are obliged to acknowledge the existence of a chain of causes, in the regress of which, however, *absolute totality* cannot be found. But we need not detain ourselves with this difficulty ; for it has already been removed in our general discussion of the antinomy of the Reason, when it attempts to reach the unconditioned in the series of phenomena. If we permit ourselves to be deceived by the deception of transcendental realism, we shall find that neither nature nor freedom remain. Here the only question is : Whether, recognising nothing but natural necessity in the whole series of events, it is possible to consider the same effect as on the one hand an effect of nature, and on the other an effect of freedom ; or, whether these two species of causality are absolutely contradictory.

Among the causes in phenomena there can surely be nothing which could commence a series absolutely, and of itself. Every action, as phenomenon, so far as it produces an event, is itself an event or occurrence presupposing another state, in which its cause is to be found. Thus everything that happens is but a continuation of the series ; and no commencement, starting of itself, is here possible. The actions of natural causes are accordingly themselves effects, and presuppose causes preceding them in time. An *original* action—an action by which something happens which was not previously—is beyond the causal connexion of phenomena.

Now, is it necessary that, granting all effects to be phenomena, the causality of their cause, which (cause) is

itself a phenomenon, must belong to the empirical world?¹ Is it not rather possible that, although for every effect in the phenomenon a connexion with its cause according to the laws of empirical causality is required, this empirical causality may be itself an effect of a causality not empirical, but intelligible—its connexion with natural causes remaining, nevertheless, intact?

Such a causality would be considered, in reference to phenomena, as the original action of a cause which is in so far, therefore, not phenomenal, but, as regards this faculty, intelligible, although the cause must at the same time, as a link in the chain of nature, be regarded as belonging to the sensuous world.

A belief in the causality of phenomena among each other is necessary, if we are required to look for and give an account of the natural conditions of natural events; that is to say, their causes in phenomena. This being admitted as unexceptionably valid, the requirements of the understanding, which recognises nothing but nature, and is entitled to it, are satisfied; and our physical explanations may proceed in their regular course, without let or hindrance.

But it is no stumbling-block in the way, even assuming it to be a mere fiction, to admit that there are some² natural causes which have a faculty that is only intelligible, inasmuch as it is not determined to action by empirical

¹ The reader will observe that Kant uses the word *cause* for the total subject of the causality both noumenal and phenomenal, and distinctly speaks of the causality—even the intelligible causality—of a thing as different from the thing (cause) itself. Here he differs from Hamilton, and, I must add, agrees with common sense. M.

² This is a distinct statement, and opposed to Kuno Fischer's account of the matter, *Comm.* p. 243. Fischer substitutes *all* for Kant's *some*. M.

conditions, but solely upon grounds of the understanding ; so, however, that the *action in the phenomenon* of this cause must be in accordance with all the laws of empirical causality.

Thus the acting subject, as a *causa phenomenon*, would continue to preserve a complete connexion with nature and natural conditions ; and only the noumenon of this subject (with all its causality in the phenomenon) would contain certain conditions, which, if we ascend from the empirical to the *transcendental* object, must be regarded as merely intelligible. For if we attend, in our inquiries with regard to causes in the world of phenomena, to the directions of nature alone, we need not trouble ourselves about what sort of basis is conceived for these phenomena and their natural connexion in the transcendental subject (which is empirically unknown to us).

This intelligible ground of phenomena does not concern empirical questions. Perhaps it has only to do with thinking in the pure understanding ; and, although the effects of this thinking and acting of the pure understanding are discoverable in phenomena, these phenomena must, nevertheless, be capable of a full and complete explanation, in accordance with natural laws. And in this case we attend solely to their empirical (as the highest ground of explanation), and omit all consideration of their intelligible, character (which is the transcendental cause of the former), as completely unknown, except in so far as it is indicated by the latter as its sensuous symbol.

Now let us apply this to experience. Man is one of the phenomena of the sensuous world, and so far also one of the natural causes, the causality of which must be regulated by empirical laws. As such, he must possess an empirical character, like all other objects of nature. We remark this

empirical character in his effects, which reveal the presence of certain powers and faculties. If we consider inanimate or merely brute nature, we can discover no reason for conceiving any faculty to be determined otherwise than in a purely sensuous manner.

But man, to whom the rest of nature reveals herself only through sense, cognises himself (not only by his senses, but) also through mere apperception; and this in actions and internal determinings, which he cannot regard as sensuous impressions. He is thus to himself on the one hand indeed a phenomenon; but on the other, in respect of certain faculties, a purely intelligible object—intelligible, because its action cannot be ascribed to the receptivity of sensibility. We call these faculties understanding and Reason.

The latter, especially, is in a peculiar manner distinct from all empirically-conditioned faculties; for it considers its objects merely in accordance with Ideas, and by means of these determines the understanding, which then proceeds to make an empirical use of its concepts, which indeed are also pure.¹

¹ The remainder of the discussion is rendered much less inaccurately by Mr. Meiklejohn (pp. 338 *sqq.*); I have, therefore, not thought it necessary to repeat it here. M.

THE END

Works by the Rev. J. P. MAHAFFY, D.D.

A HISTORY OF CLASSICAL GREEK LITERATURE.

With Appendix on Homer by Prof. SAYCE. In two vols.

Vol. I. THE POETICAL WRITERS. In two parts. Part I., Epic and Lyric. Part II., Dramatic. Crown 8vo. 4s. 6d. each part.

Vol. II. THE PROSE WRITERS. Part I., Herodotus to Plato. Part II., Isocrates to Aristotle. Crown 8vo. 4s. 6d. each part.

SOCIAL LIFE IN GREECE FROM HOMER TO MENANDER. Crown 8vo. 9s.

GREEK LIFE AND THOUGHT FROM THE AGE OF ALEXANDER TO THE ROMAN CONQUEST. Crown 8vo. 12s. 6d.

RAMBLES AND STUDIES IN GREECE. Globe 8vo. 5s. net.

PROBLEMS IN GREEK HISTORY. Crown 8vo. 7s. 6d.

THE EMPIRE OF THE PTOLEMIES. Crown 8vo. 12s. 6d.

CLASSICAL ANTIQUITIES. I. Old Greek Life. Pott 8vo. 1s.

EURIPIDES. Fcap. 8vo. 1s. 6d. (*Classical Writers.*)

THE PRINCIPLES OF THE ART OF CONVERSATION. Crown 8vo. 4s. 6d.

KANT'S CRITICAL PHILOSOPHY FOR ENGLISH READERS. By Rev. J. P. MAHAFFY, D.D., and the Right Rev. J. II. BERNARD, D.D. Crown 8vo.

Vol. I. THE KRITIK OF PURE REASON EXPLAINED AND DEFENDED. 7s. 6d.

Vol. II. THE PROLEGOMENA. Translated, with Notes and Appendices. 6s.

KANT'S CRITIQUE OF JUDGEMENT. Translated by the Right Rev. J. II. BERNARD, D.D. 8vo. 10s. net.

LONDON : MACMILLAN AND CO., LTD.

Works by Dr. BERNARD BOSANQUET

THE PRINCIPLE OF INDIVIDUALITY AND VALUE.

Gifford Lectures for 1911. 8vo. 10s. net.

THE VALUE AND DESTINY OF THE INDIVIDUAL.

Gifford Lectures for 1912. 8vo. 10s. net.

THREE LECTURES ON AESTHETIC. Extra Crown 8vo.

3s. 6d. net.

PSYCHOLOGY OF THE MORAL SELF. Crown 8vo.

3s. 6d. net.

THE PHILOSOPHICAL THEORY OF THE STATE.

8vo. 10s. net.

ESSENTIALS OF LOGIC. Crown 8vo. 3s. net.

Works by Dr. F. C. S. SCHILLER

RIDDLES OF THE SPHINX. A Study in the Philosophy

of Humanism. 8vo. 10s. net.

HUMANISM. Philosophical Essays. 8vo. 10s. net.

STUDIES IN HUMANISM. 8vo. 10s. net.

FORMAL LOGIC: A Scientific and Social Problem. 8vo.

10s. net.

Works by Prof. WILLIAM JAMES

THE PRINCIPLES OF PSYCHOLOGY. Two vols. 8vo.

25s. net.

TEXT-BOOK OF PSYCHOLOGY. Crown 8vo. 7s. net.

LONDON: MACMILLAN AND CO., LTD.

Works by Prof. HARALD HÖFFDING

- A HISTORY OF MODERN PHILOSOPHY: A Sketch** of the History of Philosophy from the Close of the Renaissance to our own Day. Trans. by B. E. MEYER. 2 vols. 8vo. 15s. net each.
- THE PROBLEMS OF PHILOSOPHY.** Translated by GALEN M. FISHER. Globe 8vo. 4s. 6d. net.
- THE PHILOSOPHY OF RELIGION.** Translated by B. E. MEYER. 8vo. 12s. net.
- A BRIEF HISTORY OF MODERN PHILOSOPHY.** Translated by C. F. SANDERS. Crown 8vo. 6s. 6d. net.
- OUTLINES OF PSYCHOLOGY.** Translated by M. E. LOWNDES. Crown 8vo. 6s.
- MODERN PHILOSOPHERS: LECTURES; AND LECTURES ON BERGSON.** Translated by ALFRED C. MASON, M.A. Crown 8vo. 5s. net.

Works by Prof. HENRI BERGSON

- CREATIVE EVOLUTION.** Translated by ARTHUR MITCHELL, Ph.D. 8vo. 10s. net.
- LAUGHTER: An Essay on the Meaning of the Comic.** Authorised Translation from the Sixth Edition by CLOUDESLEY BRERETON, L. ès L. (Paris), M.A. (Cantab.); and FRED ROTHWELL, B.A. (London). Extra Crown 8vo. 3s. 6d. net.
- AN INTRODUCTION TO METAPHYSICS.** Translated by T. E. HULME. Crown 8vo. 2s. net.
-

- A CRITICAL EXPOSITION OF BERGSON'S PHILOSOPHY.** By J. M'KEILLAR STEWART, D.Phil. 8vo. 5s. net.
- HENRI BERGSON.** An Account of his Life and Philosophy. By ALGOT RUHE and N. M. PAUL. Extra Crown 8vo. 5s. net.
- THE PHILOSOPHY OF CHANGE.** A Study of the Fundamental Principle of the Philosophy of Bergson. By H. WILDON CARR, Hon. D.Litt. (Durham). 8vo. 6s. net.

LONDON: MACMILLAN AND CO., LTD.

Works by BENEDETTO CROCE

PHILOSOPHY OF THE PRACTICAL. Economic and Ethic. Translated by DOUGLAS AINSLIE, B.A. 8vo. 12s. net.

ÆSTHETIC AS SCIENCE OF EXPRESSION AND GENERAL LINGUISTIC. Translated by DOUGLAS AINSLIE, B.A. 8vo. 10s. net.

WHAT IS LIVING AND WHAT IS DEAD OF THE PHILOSOPHY OF HEGEL. Translated by DOUGLAS AINSLIE, B.A. 8vo. 7s. 6d. net.

THE SCHOOLS OF PHILOSOPHY. A History of the Evolution of Philosophical Thought by Various Writers. Edited by Sir HENRY JONES, Professor of Moral Philosophy in the University of Glasgow. 8vo.

THE EVOLUTION OF EDUCATIONAL THEORY. By Professor JOHN ADAMS, M.A., B.Sc., LL.D. 10s. net.

GREEK PHILOSOPHY. Part I. Thales to Plato. By Professor JOHN BURNET, LL.D. 10s. net.

THE HISTORY OF MODERN PHILOSOPHY FROM HOBBE\$ TO REID. By Professor G. F. STOUT.

[In preparation.]

Other volumes to follow.

ENCYCLOPÆDIA OF THE PHILOSOPHICAL SCIENCES. Edited by WILHELM WINDELBAND and ARNOLD RUGE. English Edition under the Editorship of Sir HENRY JONES. 8vo.

Vol. I. **LOGIC.** By ARNOLD RUGE, WILHELM WINDELBAND, JOSIAH ROYCE, LOUIS COUTURAT, BENEDETTO CROCE, FEDERIGO ENRIQUES, and NICOLAJ LOSSKIJ. 7s. 6d. net.

LONDON : MACMILLAN AND CO., LTD.

